Montana Outdoors

March/April 2005

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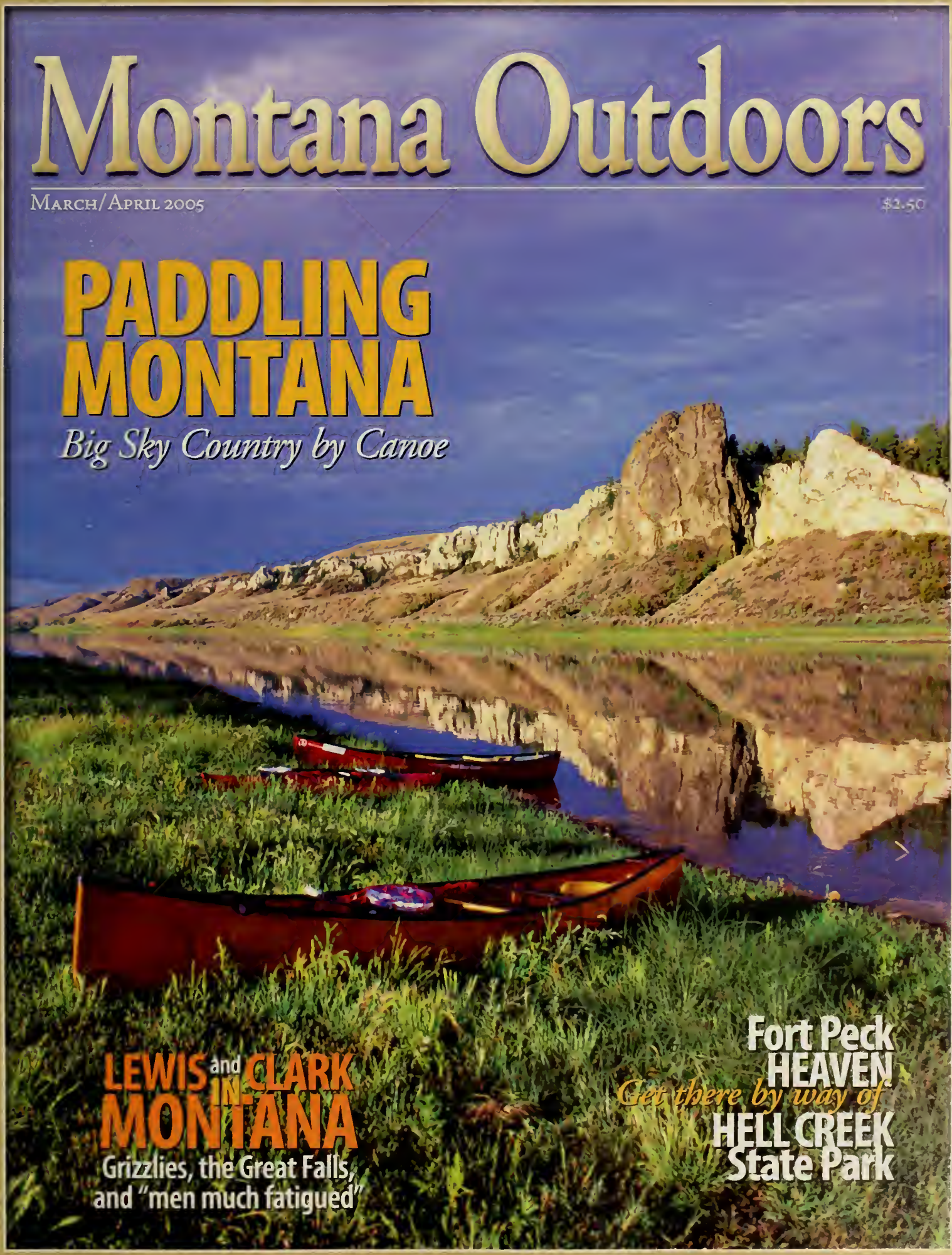

PADDLING MONTANA

Big Sky Country by Canoe

LEWIS and CLARK IN MONTANA

Grizzlies, the Great Falls, and "men much fatigued"

Fort Peck HEAVEN

Get there by way of

HELL CREEK State Park

Montana Fish, Wildlife & Parks

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COVER PHOTO: *Canoeists take a break at Eagle Creek Recreation Area along the White Cliffs portion of the Missouri River, between Great Falls and Fort Peck Lake. For more on canoeing Montana, see page 22. Photo by Craig & Liz Larcom.*

OPPOSITE PAGE: *Trout anglers on the Gallatin River marvel at the power of a large, uncooperative fish. Why are more and more women enjoying fly-fishing and other outdoor endeavors? See our story on page 14. Photo by Dale C. Spartas.*

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LETTERS

Appreciate dog safety info

I live in Virginia very near the Great Dismal Swamp National Wildlife Refuge. We have plenty of snakes, porcupines, and skunks here, too. I have a small mixed breed, the fastest dog I've ever seen. She's also very curious, and I found your article "K911" (September–October 2004) interesting and beneficial. I hope I never have to pull quills or wash skunk off her, but just knowing what to do if it ever happens is excellent knowledge to have.

Dan Stone
Norfolk, Virginia

Your article on dog safety was very informative. I would suggest you also tell folks that rattlesnake clinics are available for dogs. The expense is well worth the training dogs receive to teach them snakes are bad. It is not an easy training to see them put through, but it's much better than having them bit by a snake.

Barry Bartlette
Lolo

Editor replies: *"Snake break" clinics are conducted each year by local hunting dog clubs. In the training, handlers use a shock collar to condition dogs to fear the sound and sight of rattlesnakes (only defanged snakes are used). Some hunters say the conditioning is too hard on dogs; others believe the severe shock is necessary to ensure dogs learn to avoid every snake encountered afield. To learn more, call your local hunting dog club.*

Don't let programs sunset

I think the re-authorization of Habitat Montana ("Off to a Great Start," November–December 2004) and Block Management ("Will the Sun Set on Block Management?" September–October 2004) programs are very important to the citizens of Montana. Though I do not use Block Management for hunting access, I feel that hunting access for the public in Montana is an important part of our state and cultural heritage. Also, part of the heritage that we need to pass on are the rich resources over which we have been given stewardship, and Habitat Montana is helpful in that regard.

Keith A. Johnson
Darby

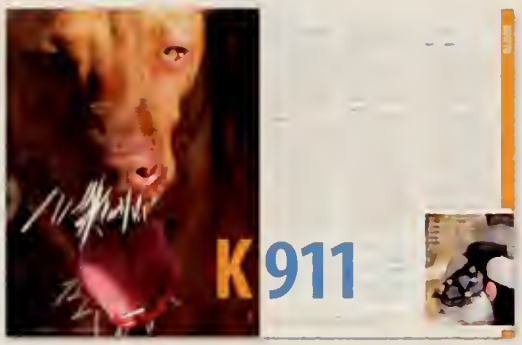
"Harvest" more acceptable

Why can't anyone seem to figure out that if we don't call it a bison "hunt," the whole picture is changed mentally. We should call it a bison "harvest." I am sure that if we use this term, people will accept it a lot easier. Hunting implies a significant degree of difficulty, while harvesting more accurately reflects the situation with Yellowstone bison. I will be ready to harvest a bison and make no apology for it. Harvesting makes sense economically, ethically, and from an ecological standpoint.

Peter L. Shinn
Missoula

Belk story touches readers

I found the story on Reeves Belk ("Some Things To Do," November–December 2004) very touching. It helps us to see that despite all the negative things that are happening in the



world, there are more people out there with a caring attitude than not. Hats off to Russ Greenwood for getting the ball rolling, and to all the others who helped make that brave boy's dream come true.

Marion Smith
Billings

Editor replies: *Many readers told us they were moved by our story on the terminally ill young man from Mississippi who wanted to hunt mule deer in Montana.*

FWP, heal thyself

On page 29 of the November–December 2004 issue, a man appears to be hunting big game with a high-powered rifle. Yet the only hunter orange visible is a small patch above his left shoulder. I found the oversight ironic considering that one of the ten most common hunting mistakes in Montana, according to the FWP website, is not wearing the legally required amount of blaze orange: "Big game hunters must wear at least 400 square inches of hunter orange above the waist and visible from all sides...."

Daniel L. Christianson
Havre

Picture sends dangerous message to hunters

On page 7 of your January–February photo issue is a photograph that sends a poor message to waterfowl hunters. An average waterfowler will look at that picture—of a goose hunter setting decoys along a partially frozen, fast-moving river—and think that might be a good idea. But in fact, it is a textbook example of how to lose a bird, drown a dog, and drown a hunter. A hunter or dog trying to retrieve a downed goose on river ice risks falling through and being swept away.

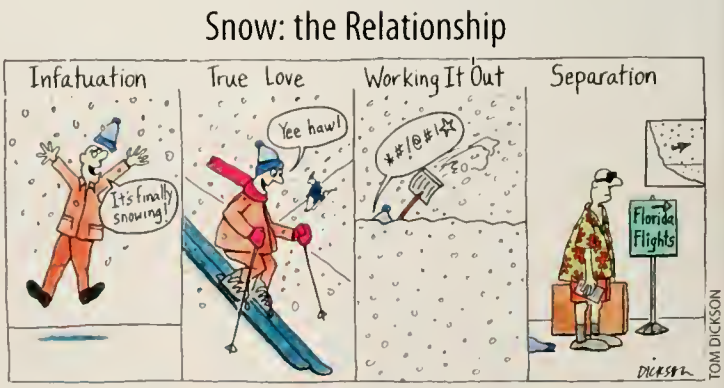
Alan G. Anderson
Lolo

Speedy Middle East delivery

Last year I ordered a subscription for my grandson quite late, with a request that you process it as soon as possible because he was a soldier in Iraq and I wanted him to get it before Christmas. I was thrilled to hear that *Montana Outdoors* arrived before Christmas and that he and his buddies all enjoyed it very much.

Audrey Tucker
Corvallis

Correction: *That's Hauser Reservoir on page 5 of the January–February photo issue, not Holter Reservoir.*



How Town Halls Create State Parks

Look at a Montana state highway map and you'll see small black icons of a mountain and the sun scattered from Whitefish to Decker. The symbols indicate Montana's 50 state parks. However, a more fitting symbol for these cultural, historic, and natural treasures might be a town hall.

That's because state parks are created and improved by groups of local citizens working together. They build public support, negotiate with landowners, and lobby for funding and legislative approval. Without community support, Montana would have no state parks.

The most recent example is our new Tower Rock State Park, along the Missouri River between Helena and Great Falls. A landmark cited by the Corps of Discovery, this 136-acre site was acquired thanks to the dedication of local residents and the Reaching the Rockies Chapter of the Lewis and Clark Trail Heritage Foundation. Travelers' Rest State Park is another important Lewis and Clark Expedition site acquired by FWP—in this case, thanks to the Lolo community's support.

STEVEN AKRE

Tower Rock State Park

Recently the FWP commission and the Montana Land Board approved acquisition of Brush Lake State Park. Northeastern Montana's first state park, Brush Lake is the result of dedicated local residents who lobbied to have the park established after reviewing and analyzing dozens of possible sites in the region.

Grassroots support has also been behind many state park improvements. For years, Clark's Lookout near Dillon lacked information displays or even a sign indicating that it was a state park. FWP created interpretive exhibits and a monument at the historic site with the assistance of $10,000, contributed by the Camp Fortunate Chapter of the Lewis and Clark Trail Heritage Foundation, and citizens who participated in planning the project.

Several years ago, FWP teamed up with community supporters to develop interpretive displays near Anaconda Smokestack State Park, including a replica of the famous brick smokestack and exhibits that detail the area's rich mining history. At Council Grove State Park, we partnered with the Confederated Salish and Kootenai tribes to create a monument recognizing the Hellgate Treaty of 1855. Community leaders also worked with us to secure funding for new interpretive signs and displays at Missouri Headwaters State Park—just in time for the Corps of Discovery Bicentennial.

The next time you are out exploring Montana, consider visiting a state park. State parks preserve places important to Montana history, and they provide recreational opportunities ranging from waterskiing and ice fishing to camping and bird-watching.

But perhaps the greatest value of state parks is what they bring to communities. State parks put local cultural and natural history into a larger, statewide context. They also highlight important community assets, while attracting tourists to nearby gas stations, cafes, and motels. State parks are great for local economies.

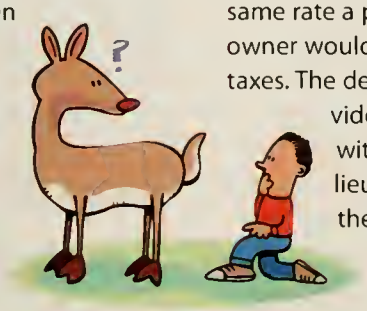
And town halls are great for state parks. A town hall is a place where citizens come together to decide what's best for their community. It represents democracy and civic pride. And in many places across Montana, a town hall also symbolizes the strong and effective local support that sustains our great state park system.

—M. Jeff Hagener *Director, Montana Fish, Wildlife & Parks*

NATURAL WONDERS

Q. *Other than the ears, is there some way to tell a mule deer doe from a whitetail doe?*

A. Look at the tail. The tail of a mule deer, doe or buck, is ropelike with a black tip. The tail of a whitetail, doe or buck, is wide and brown—except when alarmed, when that species flares its tail, exposing the white underside for which the whitetail deer is named.



ILLUSTRATIONS BY PETER GROSSHAUSER

Q. *Is it true FWP pays no taxes on wildlife management areas and its other lands?*

A. No. FWP makes annual payments to counties at the same rate a private landowner would pay property taxes. The department provides counties with payments-in-lieu-of-taxes, as they are called, totally about $300,000 each year for wildlife management areas and fishing access sites exceeding 100 acres. FWP pays no county taxes on state parks, affiliated park lands, office buildings, or fish hatcheries.

Q. *Could the seismic and thermal activity in Yellowstone National Park ever create a new volcanic eruption in our state?*

A. Not in Montana, but scientists say a massive eruption from the park itself is long overdue. The next eruption could be 2,500 times the size of the Mount St. Helens volcano. If that occurred, access to the park would likely be closed until further notice.

Wonder about some part of Montana's natural world? E-mail us at: tdickson@mt.gov.

Too close for comfort

When Bryan Golie, FWP game warden at Cascade, learned that a problem bear he'd been chasing for months was holed up in a dead cottonwood a few miles south of town last March, he didn't hesitate to check it out. But he sure hesitated a few days later when coming face to face with the huge bruin.

The black bear had been causing problems the previous fall. "Among other things, it had ripped a door off a garage and eaten an antelope inside," says Golie. The bear disappeared for a few months. Then later that winter, the warden received a call from a rancher along the Missouri River near Cascade.

"He'd found a bear holed up in an old cottonwood tree, in the middle of his cattle pasture," says Golie. "He was worried it would start feeding on calves."

The warden was sure it was the problem bear. After arriving at the ranch, Golie, fellow warden Kelly Friede, and FWP wildlife biologist Cory Loecker found the bruin. It was awake, watching them from a den in the base of a tree.

"We needed to tranquilize it, but there was a branch covering the opening that was in the way, so I had to crawl down near the bear and pull it out," says Golie. "As I reached down, the bear smacked the stick with his paw. It moved so fast that I would have been in big trouble if it had gone after me right there."

Fortunately, the bear remained in the tree. After tranquilizing the animal, the three FWP employees hauled it through the small den opening and into a bear trap for relocation to the nearby Beartooth Wildlife Management Area.

"It was huge," says Golie. "We estimated it weighed 400 pounds, and it took all of our combined strength to get it up onto the truck." Also in the den was the partly eaten carcass of a whitetail buck. Says Golie: "It was like the bear had dragged that in as a midnight snack or something."

MONTANA FWP

SMALL HOLE, BIG BEAR
Counterclockwise from left: The 400-pound bear in its dead cottonwood tree den; pulled from the hole after being tranquilized; warden Kelly Friede and wildlife biologist Cory Loecker with a whitetail "snack" the bear had dragged into the den.

Montana Fish, Wildlife & Parks

Three new FWP Commission members named

Citing his commitment to "preserving our great hunting and fishing tradition," Governor Brian Schweitzer announced in January the selection of three new members of the five-person Fish, Wildlife & Parks Commission.

Steve Doherty, appointed commission chairman, is an attorney specializing in Native American issues who served four terms in the Montana Senate. A resident of Great Falls, Doherty served on the Senate Fish and Game Committee and was Senate Minority Leader in 1999 and 2001. A hunter and angler, he holds a bachelor's degree in biology in addition to his law degree.

Victor Workman of Whitefish owns Montana Land Office, a real estate business. He served as a Whitefish city councilman from 1995 to 1998 and ran for the legislature in the 1980s. An avid outdoorsman and a lifelong hunter and angler, Workman graduated from Lincoln County High School in Eureka and attended both Montana State University and the University of Montana.

Shane Colton, an attorney in Billings, grew up working on farms and ranches in the Denton area. He is a member of the Spotted Ass Sporting Clays Club as well as the Billings Rod and Gun Club. A graduate of Denton High School, Colton received his bachelor's degree from Montana State University and his law degree from the University of Montana.

The commission's other two members, appointed previously by Governor Judy Martz, are Tim Mulligan of Whitehall and John Brenden of Scobey.

The FWP Commission is composed of members from five geographical districts. Members serve staggered four-year terms. Three members are appointed at the beginning of a governor's term and two are appointed two years later.

Do the
State Park TWIST

Fun things you never expected to do in Montana's state parks

Sleep above the caverns
Few people know that Lewis and Clark Caverns State Park has three rustic rental cabins. The cozy accommodations are just $25 per night ($35 after May 1) and include electricity and heat, but no water or cooking facilities. The cabins are a great place for reading a thick novel over the weekend between hikes along the nearby Missouri River. Call (406) 287-3541.

CRAIG & LIZ LARCOM

Complex land swap puts Alberton Gorge in public's hands

Peter Dayton recalls one day in the mid-1980s when he was kayaking down the Clark Fork River through the Alberton Gorge, 35 miles west of Missoula. Staring up at the spectacular scenery lining both sides of the steeply walled canyon, Dayton realized the gorge had to be preserved.

"I was with some friends, and I looked up and said, 'Wouldn't it be terrible if the bluff was lined with houses and fences? We really ought to try to do something to protect this,'" says Dayton, a Missoula real estate attorney.

Nearly two decades later, Dayton got his wish. On November 30, 2004, a complex land exchange was completed, securing in public ownership one of the most beautiful stretches of whitewater in western Montana.

The Alberton Gorge is renowned for its stunning scenery, trout fishing, and raging rapids that attract more than 25,000 kayakers, canoeists, and rafters from throughout Montana and the Northwest. The gorge is flanked by sheer cliffs of rose-colored bedrock and steep slopes of conifers. Currently no houses line the canyon, and gorge advocates want to keep it that way.

In addition to providing prime habitat for tainbow ttout, Alberton Gorge is home to elk, deer, wolves, eagles, and ospreys. What's more, wildlife traveling between mountain ranges on both sides of the valley use the gorge as a natural migration corridor.

PETER DAYTON

GORGEOUS Both sides of the scenic Alberton Gorge are now in public ownership, protected from housing and other development.

As part of a complex series of land exchanges involving federal, state, and private interests, FWP now owns a 7-mile, 306-acre corridor along both sides of the gorge. Dayton, who provided free legal assistance through much of the process, says the land had been owned by NorthWestern Energy, which sold it to the Missoula-based Five Valleys Land Trust, which in turn transferred the land title to FWP.

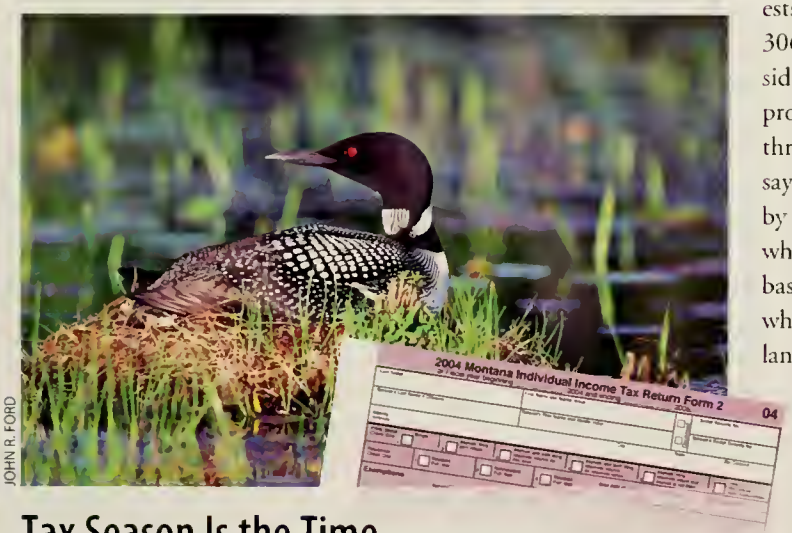
In exchange, the land trust received portions of two sections of U.S. Forest Service land near Tarkio that will be later exchanged for state lands to be sold to pay for the original purchase of the Alberton Gorge property from NorthWestern Energy. As part of the land exchanges, FWP traded several properties in western and central Montana to the Forest Service. They include Frank Lake Fishing Access Site, Natural Bridge State Park, and Tizer Lake Fishing Access Site. Surrounded by national forest, the three areas will continue to be managed for public recreation.

"Getting this gorge into public ownership was so important to our community," says Greg Tollefson, special projects director for Five Valleys Land Trust. "This is a recreation and wildlife resource that deserves all the protection it can get."

Tollefson says credit for the land deal also goes to River Network (a national conservation group), Mineral County, and many private citizens.

FWP officials say the department will manage the 7 miles of undeveloped riverfront to protect natural resources, while continuing to provide recreation such as fishing, boating, and wildlife watching.

Dayton, who kayaked the gorge in early December to celebrate completion of the land exchange, says it was a thrill to look up at the bluff this time and know it would remain unspoiled. "For years I'd feared it would get developed like so much other riverfront property in Montana," he says. "It's nice knowing it's now protected."



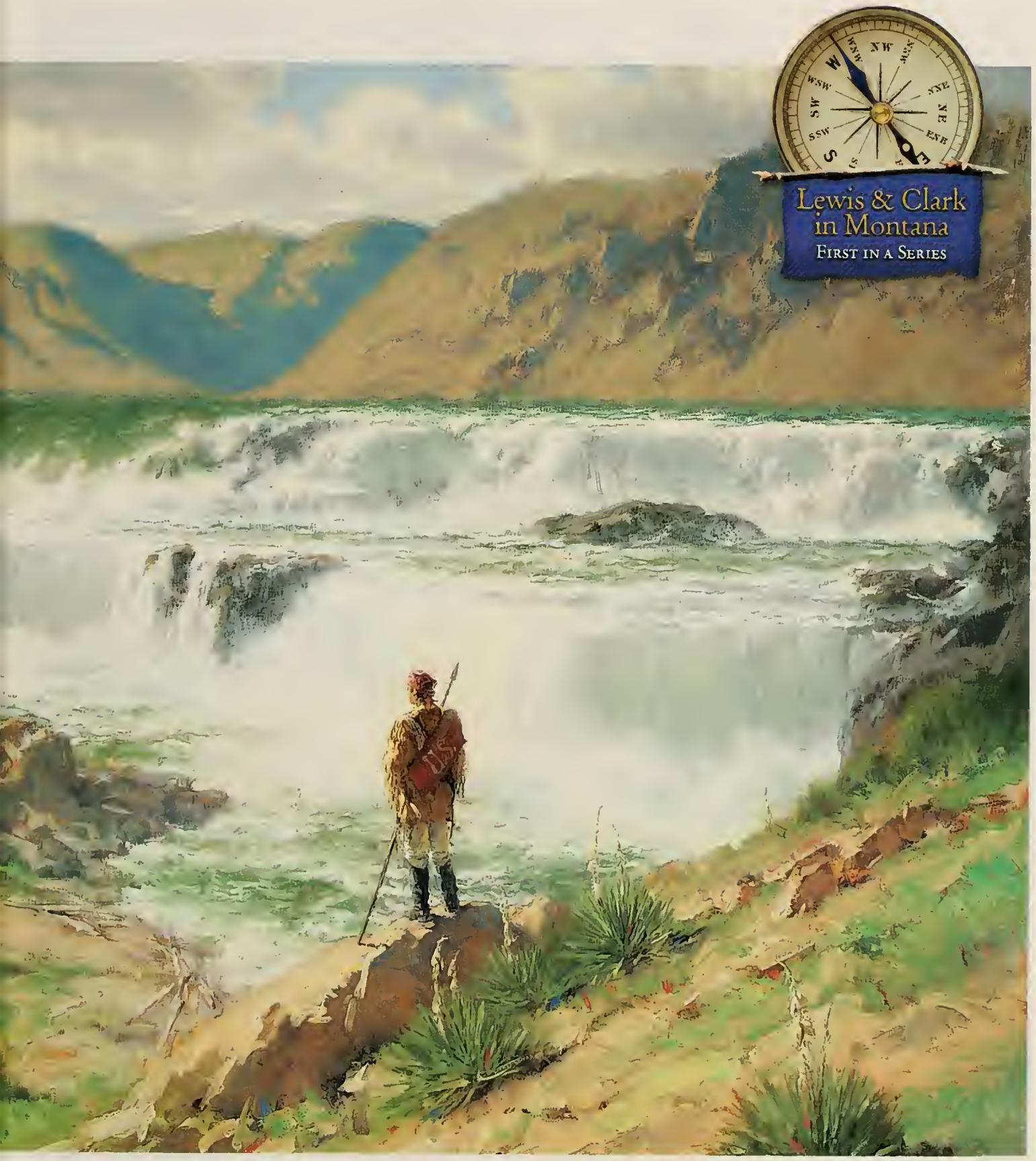
JOHN R. FORD

Tax Season Is the Time To Support Nongame Wildlife

Help loons, bluebirds, and other native nongame wildlife by making a donation to Montana's Nongame Wildlife Program on your state income tax form this year. It's easy, fast, and the money helps FWP manage nongame species harmed by habitat loss and other threats. "Now that we're into tax season, look for the eagle symbol on your state income tax form," says Kristi DuBois, FWP native species coordinator. "Donations through this checkoff are the main source of funding that helps us help Montana's nongame wildlife."

Lewis and Clark in Montana

The Corps of Discovery's amazing journey through Big Sky Country



Lewis & Clark in Montana

First in a Series

"Captain Lewis Arriving at the Great Falls of the Missouri—June 13, 1805"

By Dayton Duncan

Paintings by Charles Fritz

Composition of Lewis and Clark artifacts: Lewis's watch, Clark's watch fob compass, Lewis's telescope, and two of Clark's journals.
MISSOURI HISTORICAL SOCIETY ARCHIVES

EDITOR'S NOTE: In April 1805, Captains Meriwether Lewis and William Clark and the Corps of Discovery entered what is today Montana. Over the next five months, they traveled up the Missouri and Jefferson rivers and along the Bitterroot Mountains, making some of the most significant discoveries of their epic adventure. The following year, the explorers returned through Montana on the way back to Washington, D.C., to report to the anxious president who commissioned their journey. Now, two hundred years later, the Lewis and Clark Bicentennial is underway. Over the next two years, *Montana Outdoors* will feature a series of articles commemorating the monumental journey and its significance to Montana's fish, wildlife, and parks.

NO PLACE CLAIMS MORE of the Lewis and Clark trail than Montana. In their epic expedition across the continent searching for the Northwest Passage on behalf of President Thomas Jefferson, the Corps of Discovery covered more miles within Montana than in any other state. Montana is where they saw more grizzly bears than other human beings; where they gorged themselves on buffalo meat (9 pounds a man per day) and where they ran out of whiskey; where they were battered to the ground by hailstones and wore out a pair of moccasins every two days crossing the rugged terrain; where they simultaneously sweltered in 90 degree heat and beheld their first snow in midsummer.

Montana constantly beguiled them with what Lewis called "seens of visionary inchantment." And it just as constantly challenged them with yawning distances, frustrating delays, and unexpected obstacles.

True, it wasn't the crossing and re-crossing of Montana that earned the Lewis and Clark Expedition its place in the nation's memory; it was the crossing and re-crossing of the entire West. But if it hadn't been for Montana, there'd be much less worth remembering.

At the Confluence of the Marias and the Missouri Rivers

Standing here now, where the Marias River joins the Missouri near the town of Loma, it's difficult to imagine that this spot presented Lewis and Clark with one of their severest tests—as both explorers and commanders. They had no Rand McNally Atlas to guide them through Montana's vastness, only some advice the Hidatsa Indians had given them the previous winter in North Dakota, lines drawn on a dirt floor with mounds of earth to show the terrain. And here, in early June, was a major fork they hadn't been told about. But which fork would lead them to the magnificent waterfalls the Hidatsas had described, and beyond that, to the Missouri's headwaters and the fabled Northwest Passage? Everyone realized that making the wrong choice might doom the expedition. Which one? Without map or native advice, they camped to ponder the dilemma. "Our cogitating faculties [have] been busily employed all day," Lewis noted in his journal.

The northern fork was muddy, just as the river had been all the way from St. Louis. Led by Pierre Cruzatte, the expedition's most experienced boatman, all the men concluded it must be the true Missouri. But Lewis and Clark thought otherwise. The southern fork, though wider, was shallower, clearer, swifter, with a rockier streambed—more like a mountain stream, they reasoned, and therefore the one to follow.

For a week they delayed here. Scouting parties probed up each fork, searching for any conclusive evidence that might settle the matter. Nothing. The men still preferred the northern fork, even after Lewis named it "Maria's River," for a cousin in Virginia. The two captains still preferred the southern fork, and on June 9 gave the order to take it.

Four days later, pushing ahead of the main party, Lewis surveyed "the grandest sight I ever beheld"—the mighty cataract of the Great Falls, proof that he and Clark had been right. The captains' "cogitating faculties" were never questioned again.

On the Missouri River Past the Great Falls

The delay at the Marias had been followed by another setback: Portaging around the Great Falls had consumed a month of exhausting labor, not the half-day the captains had originally planned. By July 16, the expedition was far behind schedule. Instead of nearing the Pacific as they had once hoped, the explorers were still on the seemingly endless Missouri, moving south past what is now the town of Cascade.

But tantalizingly hopeful signs greeted them as well. The river seemed to be leading them into the mountains at last. Perhaps the Northwest Passage was just around the next bend. On the same day, they

---

Dayton Duncan, of Walpole, New Hampshire, is a writer, editor, and award-winning producer of the PBS documentary Lewis and Clark: The Journey of the Corps of Discovery. *A version of this story originally appeared in* Big Sky Journal, *Summer 1998.*

The paintings by Billings artist Charles Fritz are part of his current traveling exhibit and companion book, An Artist with the Corps of Discovery, *published by Farcountry Press.*

came across 40 small, vacant shelters made of willows, a recently abandoned camp of the Shoshones, the tribe whose horses they would need to cross the mountains. Lewis hurried ahead to find them.

Yet, in the midst of this building tension between impatience and excitement, the explorers also focused on more mundane matters. John Ordway mentions hiking back 4 miles to recover an axe he had forgotten at the last campsite. Patrick Gass notes the many islands in the stream and the dark rock in the mountains just ahead. Joseph Whitehouse records sighting large buffalo herds and covering 20 miles before stopping. Clark seems impressed by the profusion of shrubs and bushes—and manages to spell the word "berry" three different ways in the same sentence.

For Lewis, July 16 was bracketed by two notable moments. Breakfast, he writes, was "the first time I ate of the small guts of the buffaloe cooked over a blazing fire in the Indian stile without any preperation of washing or other clensing and found them very good." And when he made camp at the end of the day of scouting, he discovered to his dismay that his mosquito netting was back with the main party. That night the bugs ate him alive. "Of course suffered considerably," Lewis concludes his journal entry, "and promised in my wrath that I never will be guilty of a similar peice of negligence while on this voyage."

At the Three Forks of the Missouri

On July 27, the mighty river the Corps of Discovery had been following for 14 agonizing months branched into what Lewis called three "noble streams," all of them issuing from mountains in the dis-

"Low Light at the Three Forks—July 28, 1805"

William Clark's elkskin-bound field journal, closed.

DAVID SCHULTZ, 1997. MISSOURI HISTORICAL SOCIETY ARCHIVES

tance and joining here to form the Missouri, near what is now the town of Three Forks.

Lewis considered it "an essential point in the geography of this western part of the Continent" and climbed a limestone outcropping to survey the region. Spread out before him, like a verdant bowl ringed by snow-capped ramparts, was a vast plain of green meadows ("one of the best winter pastures on earth," he predicted), watered by meandering ribbons of rivers that sparkled in the sun.

The captains named the southeastern fork the Gallatin, after Secretary of the Treasury Albert Gallatin, and the middle fork the Madison, for Secretary of State James Madison. The western stream—the one they hoped would lead them to the Northwest Passage—they named the Jefferson, "in honor of that illustrious personage Thomas Jefferson, the author of our enterprise."

The Three Forks was already an "essential point" in one expedition member's life. Five years earlier, the Lemhi Shoshones had been camped here when the Hidatsas attacked, killed a number of people, and carried off some captives, including young Sacagawea, who was now re-entering her homeland for the first time since her abduction. In the years following the expedition, this same spot would become equally essential to the fates of three other members. George Drouillard and John Potts, returning here as fur trappers, would be killed by the Blackfeet. John Colter, meanwhile, would narrowly escape a similar death by embarking on the 200-mile, barefoot-and-naked run that still ranks him as legendary among American mountain men.

Beaverhead Rock

Beyond the Three Forks, the Jefferson itself divided into smaller streams, each one swifter, shallower, and harder to ascend. The explorers had to wade in ice-cold water to drag and push their cumbersome dugouts against the current. Bruises, sprains, cramps, dislocated shoulders, and legions of unrelenting mosquitoes plagued the men as they struggled forward. "Men much fatigued" became a constant refrain in the journals. Compounding the misery was an undercurrent of despair: There was still no sign of the Shoshones and their horses. "If we do not find them," Lewis confided in his journal, "I fear the successful issue of our voyage will be very doubtful."

Then, on August 9, just north of modern-day Dillon, Sacagawea pointed to an outcropping ahead that seemed to emerge from the swampy meadows and nose its way upstream. Beaverhead Rock, she said the Shoshones called it; they were nearing the headwaters of the Missouri and her people's home-

The Corps of Discovery entered what is today Montana on April 25, 1805. Expedition members traveled up the Missouri, portaging around the Great Falls, to the Three Forks. From there they headed up the Jefferson to the Beaverhead, crossed Lemhi Pass into today's Idaho, returned to Montana and traveled down the Bitterroot, then crossed into Idaho again at Lolo Pass before reaching the Columbia and, finally, the Pacific Ocean.

On the return voyage, the expedition split into two groups at Montana. Clark led his men up the Bitterroot River, past Three Forks to the Yellowstone (then called the Elk), while Lewis traveled up the Blackfoot River, over the Continental Divide, up the Marias, then back to the Missouri. The two friends reunited on August 12, 1806, near the confluence of the Missouri and Yellowstone.

MONTANA OUTDOORS

"Sunset on Lemhi Pass—August 12, 1805"
6 · [illegible]

land. The news briefly revived the lagging spirits of the tired men.

Lewis decided it was time for action. That evening, he wrote in his journal, "I determined to proceed [ahead] tomorrow with a small party to the source of this river and pass the mountains to the Columbia." Regardless of the risk or the time it might take, he promised himself, he was going to find the Northwest Passage and the Indians to help the expedition cross it. Early the next morning Lewis wrote out instructions for Clark, in case he never returned. Immediately after breakfast, he slung his pack on his back and set off on foot with three men, leaving Beaverhead Rock and his other comrades behind.

On Lemhi Pass

No one knows precisely when the myth of a Northwest Passage was born: the great dream of an easy water route to the Orient and its riches. Columbus was pursuing it when he bumped into North America. Spanish conquistadors combing the Southwest brought along the makings of sail and mast, convinced they might find it in the deserts. French voyageurs hoped to discover it over each horizon. On behalf of Great Britain, Alexander Mackenzie crossed Canada twice in a vain search for it.

But we do know exactly where and when the dream of the passage was dealt its death blow. It was here, at Lemhi Pass, southwest of Dillon on the Montana–Idaho border, on August 12, 1805.

Lewis's desperate search for the Shoshones had led him and his three men along a small creek toward a gentle rise to the west. Hugh McNeal paused briefly to straddle the stream with his feet and "thanked his god," Lewis wrote, that he had "lived to bestride the heretofore deemed endless Missouri." They stopped again to drink from a small spring—"the most distant fountain" of the Missouri, according to Lewis—and then hurriedly ascended to the ridgeline of the Continental Divide. No American citizen had ever been there before.

Shipmaster's-type telescope with collapsible brass and wood-and-leather sections, made by William Cary, London, ca. 1802, owned by Meriwether Lewis.

DAVID SCHULTZ, MISSOURI HISTORICAL SOCIETY COLLECTIONS

All of geography and science had prepared Lewis to expect to see a vast plain on the other side with another big river flowing through it, just a short portage connecting the Missouri with the Columbia, the Atlantic with the Pacific. What he saw instead were more mountains: "immence ranges of high mountains still to the West of us, with their tops partially covered with snow."

If the view seems pleasantly scenic today, put yourself in Lewis's moccasins. Those mountains—where mountains weren't supposed to exist—meant he would have some unwelcome news to report to

President Jefferson about the Northwest Passage. Even worse, in order to deliver that unhappy report, he would have to cross those mountains twice—going west and returning east. Patrick Gass described them best. They were, he wrote simply, "the most terrible mountains I ever beheld."

Lewis on the Marias River

In order to explore more of the Louisiana Territory on the return trip from the Pacific, the captains divided their party when they returned to Montana in July 1806. Lewis took three men up the Blackfoot River and over the divide to reconnoiter the upper reaches of the Marias River, presumably the northern boundary of the new Louisiana Territory. On July 26, 1806, as the group made their way along Two Medicine Creek, south of modern-day Cut Bank, they unexpectedly encountered eight Blackfeet warriors.

Both sides warily approached each other. Lewis offered some handkerchiefs, flags, and a peace medal (with Jefferson's likeness embossed on one side, two hands shaking in friendship on the other). Communicating through sign language, the two groups finally decided to camp together near the river.

Captain Clark's elkskin-bound journal, open to undated entry of December 1805. Clark Family Collection. William Clark Papers.

CARY HORTON, MISSOURI HISTORICAL SOCIETY ARCHIVES

At dawn on July 27, Lewis was awakened by the sounds of a struggle. The Indians had been caught trying to steal the explorers' guns and horses, and in the ensuing hand-to-hand fighting one of the Blackfeet was stabbed to death. A second warrior was shot by Lewis. It was the only time the Corps of Discovery fired its guns in anger.

As the six other Blackfeet galloped north to alert their tribe, Lewis and his men prepared to flee south, toward the Missouri and the safety of the canoes. Before he departed, Lewis reclaimed his flag, but on one of the dead warriors he purposefully left the peace medal "that they might be informed who we were." A portent, perhaps, of the future.

Clark at Pompy's Tower on the Yellowstone

While Lewis explored the Marias, Clark's group crossed what is now Bozeman Pass and headed down the Yellowstone River, which local Indians called the Elk, in two dugouts. Once again, the Great Plains astonished the expedition members. Grasshoppers had "destroyed every sprig of grass for miles," Clark noted. A buffalo herd forced them to stop for hours while the animals crossed the river in front of the canoes. Elk were so abundant that one day the crew traveled 73 miles and noted "we have not been out of sight of them."

On July 25, 1806, east of present-day Billings, they reached a solitary sandstone formation overlooking the Yellowstone. Clark clambered to its top for a dramatic view downriver and then pondered what to name this remarkable landmark. Over the previous year and a half, the captain had grown increasingly fond of Sacagawea's infant son, Jean Baptiste, the "little dancing boy" whom he nicknamed Pomp. In the child's honor, the big rock was christened Pompy's Tower (now Pompeys Pillar) and a nearby stream, Baptiste Creek.

And near some Indian pictographs, Clark inscribed his own name and the date in the soft stone of the outcropping. It's still there, preserving the tender memory of a rugged explorer and his fatherly affection for a little Indian boy—the only physical evidence the Corps of Discovery left on the landscape that survives to this day.

"Captain Clark Descending Elk River"

"Pompy's Tower—July 25, 1806"

Doing It Themselves

At Becoming an Outdoors-Woman workshops, women learn how to enjoy the outdoors without relying on others

By Becky Lomax

In an outdoor pavilion at the Lubrecht Experimental Forest Conference and Meeting Center, 30 miles northeast of Missoula, I'm with a group of women swapping stories about the obstacles that prevent them from learning more about—and fully enjoying—Montana's outdoors. "My husband keeps buying me fly-fishing equipment and taking me out with this cool stuff," says one woman, laughing. "But he has no idea how to teach me to fish." Another summarizes the frustration of women with overly helpful spouses. "I've been fly-fishing for 40 years but never tied my own leader," she says.

The women, ranging from their mid-20s to their mid-60s, are in a class learning the basics of fly-fishing. Over the next three days, we and several dozen other women from all walks of life will participate in a Becoming an Outdoors-Woman (BOW) workshop. In addition to fly-fishing, we will learn how to shoot a bow, fire a rifle, handle a canoe, administer emergency first aid, and other basic aspects of hunting, fishing, and camping.

Dr. Christine Thomas, a professor of natural resources at the University of Wisconsin, came up with the Becoming an Outdoors-Woman concept. Her research in the late 1980s found that the biggest barrier keeping women from enjoying outdoors recreation was a lack of supportive learning opportunities. Since BOW began in 1991, roughly 150,000 women have participated in weekend workshops in 40 states and three provinces. Montana's BOW Program, run by Montana Fish, Wildlife & Parks, began in 1994 and has reached more than 1,000 women.

"Most men learn to fish, hunt, camp, and canoe as boys from their dads, older brothers, and uncles," says Liz Lodman, Montana's BOW coordinator. "But many women never get the chance to learn how to clean a fish, fire a shotgun, or start a campfire. We give them that chance."

The Leap

Most of the 50 other women I've joined this July weekend are strangers. A few came in pairs, but most of us signed up on our own. One woman received the course as a present from her brother. A grandmother has come to learn skills to teach her granddaughters. An outfitter hopes to learn more techniques to use in her business. And one participant wants to learn about fly-fishing—but not from her husband.

At registration, we don name tags that include where we live and which 4 of the 17 offered classes we've signed up for. Like-minded participants, identifiable by their tags, flock together and begin chatting. Most are from western Montana, though easterners have trekked over the divide from Billings, Livingston, and Havre, and several are from out of state. Each year the BOW workshop moves to a different location around Montana. Though participants may camp, most stay in inexpensive cabins and lodges at the workshop sites.

In addition to the comfortable accommodations, there's plenty of tasty food. We're not eating hardtack here. The Dutch oven cooking class makes delicious hors d'oeuvres for social hour, and the Lubrecht conference center's kitchen staff whips up generous portions of lasagna, fajitas with guacamole,

LIZ LODMAN

BIRDING BEGINNERS Participants in a BOW class learn to identify raptors and other winged wildlife. Primarily taught by women, BOW workshops provide a supportive setting where women can learn the basics of camping, fishing, and other outdoors skills.

BOW'S GOAL Anne Bryan of Bozeman, here landing a Yellowstone cutthroat caught in the Gravelly Mountains, exemplifies what BOW aims to produce—women with the confidence and skills to enjoy the outdoors on their own.

grilled chicken, and sesame Chinese salad. The food—along with the lively conversation—energizes us for the work ahead.

Knot That Hard

Fly-casting class begins with us learning to tie on a hook with a cinch knot, and we all squint while copying our instructor's demonstration. Next, we head outdoors to begin casting lessons.

Some in our group look like they have been fly-casting their whole lives. Janet West, a seasoned angler from Swan Valley, gracefully sends her line out 50 feet from where she stands. West has taken the fly-casting class at several previous BOW workshops. "I learn something about fly-casting every time," she says.

The rest of us laugh as we get the hang of flinging the plastic-coated fly line through the air. Instead of flies, we are using tiny wool tufts tied to our line. Those of us who occasionally hang up the wool tuft in our hair understand why we're not using real hooked flies.

Instructor Kay Roos and her daughter and fellow instructor Kathie Roos patiently show us how to move our fly line so it goes where we want it to. We don't remotely look like the experienced fly-casters on the nearby Blackfoot River, but the Rooses aren't about to say so. Instead, they encourage each of us, raising an elbow here, straightening a floppy wrist there. Right about when my arm feels in need of pain relievers, everything finally clicks, and I send my wool "fly" soaring 10 feet farther than I ever thought I could.

Tanya Lemons of Frenchtown says she plans to return home and continue practice casting in the backyard.

"Now I don't have to wait until camping with the family to fly-fish," she says. "I feel confident I can take my kids to the river for some fishing after school."

After watching the mother-daughter instruction team, Joyce Henderson of East Helena realizes the outdoors is not just for fathers and sons. "Moms and daughters can go on that fishing trip, too," she says. Henderson adds that age doesn't need to be a limiting factor, either. Her BOW course on canoeing was taught by older women. "Some of the instructors were in their 60s and had not started canoeing until they were in their 50s," she says. "They were lively, outgoing, and not afraid to take seven novices in canoes down the Clearwater River."

Becky Lomax is a freelance writer in Whitefish.

Balls and Arrows

"Poundage is not important," says archery instructor Cherrie Angel. "Accuracy is." What she means is that if archers can aim well, they don't need a powerful bow—measured in pounds of pull—to shoot targets or hunt. With inspiration that eyesight matters much more than arm strength, the other participants and I grab our bows. First, we fire arrows into the distance, a few of them drilling into the ground with a satisfying *thwang*. Later, on a shorter range, we shoot at targets. To improve our accuracy, the instructors help us with our stance and position. "Pretend like you're squeezing an orange with your shoulder blades," says Angel as we draw our bows to the anchor point, elbows out, palms down.

> "I realized I needed to take care of myself and not expect my husband to help me out."

After we've shot the targets full of holes (and missed several targets altogether), Angel pulls out a bag of plastic basketballs. As she rolls them along the ground and tosses them into the air, we attempt to hit the moving targets. It's nearly impossible, and cheers break out whenever someone's arrow actually hits home.

Dutch Oven Cooking

Though temperatures have climbed to 95 degrees outside this afternoon, 13 women crowd around nine Dutch ovens, cooking the hors d'oeuvres for the evening's social hour. In covered cast-iron pots topped with charcoal briquettes, we're cooking chicken hot wings, pineapple au gratin, grouse cacciatore, venison rancheros, and cheesecake brownies. Many of the participants own Dutch ovens but nod in agreement when one woman admits, "I haven't a clue how to cook in it." Under instructor Marian Stratton's guidance, we partner up to prepare our dishes according to time-tested recipes. After chopping, dicing, measuring, mixing, and stirring ingredients, we haul the food-filled pots outside. The smaller Dutch ovens are no problem, but the big ones take two of us to lug outdoors.

Wearing welding gloves, Stratton moves hot briquettes around the pots to adjust the heat. Periodically, we sneak peeks inside, a difficult feat with the heat and weight of the lids. Whiffs of fragrant chocolate and the smell of venison browning in onions and garlic make our mouths water. A few participants joke they expected to starve during this weekend of "roughing it," but it's obvious no one will go home hungry.

Through the Night

While I learn to cast a fly, fire a bow, and cook cacciatore, another group of women takes outdoors self-reliance to a higher level. They are learning to read a map, use a compass, administer first aid, and even survive overnight in the wilderness.

Tammy Royer of Stevensville knows how easily companions can get separated when outdoors. She once had to find her way back to camp alone after becoming separated from her hunting companions. The fear of being lost prompted her to sign up for the BOW class on wilderness survival.

"I realized I needed to take care of myself and not expect my husband to help me out," Royer says. "When reading a map, all I could tell was north, south, east, and west." Instruction in map and compass paid off as she and her BOW partner successfully navigated a cross-country field course.

After learning how to build a fire, select proper equipment, and prepare a pack, Royer and the others in her class spent a night outside in brush shelters they built themselves, equipped only with what they could take in a day pack. "We wore large plastic garbage bags to stay warm," she says. "It's amazing how much heat they

BECKY LOMAX

BECKY LOMAX

BECKY LOMAX

LIZ LEWIS

GROUP SUPPORT Researchers have found that women have fewer opportunities to learn about outdoor activities than men do. In Montana, the BOW Program has filled that need since 1994 with fun, supportive workshops where women discover the pleasures of outdoors recreation. Clockwise from upper left: mastering the basics of fly-casting; cooking meals and hors d'oeuvres in a Dutch oven; using a compound bow to fire arrows into a target; learning to use a compass; surviving the night using tarps for blankets; building a campfire; cleaning and butchering a deer; and hunting pheasants as part of an advanced-education course called Beyond BOW.

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CINDY MARSHALL

keep in." Hefty bags aren't as warm as sleeping bags, however. At sunrise, it took little encouragement to get the group back to the lodge, where warm coffee awaited. Royer says the night wasn't the most pleasurable of her life, but "it's a good feeling to know I could do it on my own if I had to."

Once home, Royer went shopping for essential survival gear. She bought a wilderness compass, maps for fall hunting trips, and several different fire-starting devices. In early fall, before heading off on her first bowhunting trip of the season, she tucked a large black plastic bag in her day pack—just in case. Summing up what many women feel after participating in a BOW workshop, Royer says, "Now I feel confident I can take care of myself."

Montana's BOW workshops run throughout the year and offer classes on bird-watching, upland bird hunting, deer and elk hunting, kayaking, and more. For information call (406) 444-2615 or go to the FWP website (fwp.mt.gov) and click on "Education." For information on BOW programs in other states and in Canadian provinces, go to www.uwsp.edu/cnr/bow.

Aiming to Make Better Hunters

Why do 1,600 Montanans volunteer thousands of hours each year to improve hunter safety and ethics?

By Sam Curtis ■ Photos by Adam Van Zee

Eighteen-year-old Rachael Mills stands in the middle of the cafeteria at Belgrade Intermediate School and aims a rifle at the back of the room. This might not seem like the safest place to wield a firearm, but the junior hunter education instructor poses no danger to her fellow students with the unloaded and disabled gun she's holding. In fact, she's helping them learn to avoid accidents with firearms. Lead instructor Ken Mills stands behind his daughter and explains proper shooting positions to a group of 25 mothers, fathers, daughters, and sons. Nearby, in the school band room and library, two similar groups are watching, listening, and practicing as 15 other volunteer instructors teach young hunters, accompanied by their parents, the fine points of safety, responsibility, and ethics. It's hunter education season in Belgrade.

Montana's weeklong hunter education classes run across the state every spring and fall. From Monday through Friday, the volunteer instructors spend two hours each evening working with the mostly 11- and 12-year-old students on demonstrations and drills. On Saturday, during a four-hour field session, the instructors guide students through a final exam, a live firing range, and five stations where the would-be hunters demonstrate their newly acquired skills as safe and responsible gun handlers.

Each year, across the state, 1,600 Montanans volunteer 35,000 hours to teach 500 classes of bowhunting and basic hunting instruction through the Montana Fish, Wildlife & Parks Hunter Education Program. Roughly 10,000 students become certified hunters each year, taught by volunteers who have donated time and energy—some for more than 40 years.

"Without our volunteer instructors, the Hunter Education Program wouldn't exist," says Thomas Baumeister, FWP's hunter education coordinator. "They're the backbone of the program."

According to social scientists, that backbone should be weakening. In his much-acclaimed book *Bowling Alone*, Harvard University sociologist Robert Putnam writes that volunteerism and other types of community involvement nationwide are on the wane. Increasingly, he says, people choose to spend time on their own, not with others.

Yet each year, hundreds of experienced hunters across Montana are willing to give up their evenings and weekends to help kids and others learn how to hunt ethically and handle firearms safely. What accounts for this outpouring of volunteerism? And how does Montana FWP balance the desires of experienced hunters to volunteer with the needs of would-be hunters to receive quality instruction?

TEAM TEACHING Before a classroom of middle school students, junior hunter education instructor Rachael Mills demonstrates the correct way to hold a rifle while her father, lead instructor Ken Mills, comments from behind. The Millses are among 1,600 hunter education instructors in Montana who, for a wide range of reasons, donate more than 35,000 hours each year to the program.

■ HE'S IN THE WOODS, TOO

Robert Larrson, 75, has been teaching hunter education in St. Ignatius for 47 years, ever since Montana's program began in 1957. His motivation for doing so has never changed.

"We are trying to save lives, prevent accidents, and keep people from dying in the woods from accidental gun shots or from exposure," Larrson says. "I still tell the stu-

dents that one reason I'm teaching is that when they go out in the woods with a gun, I'm going to be in the woods too, along with my family and friends. And we want the woods to be safe."

Instructor Max Witt has been teaching hunter education in Belgrade for six years. During the Saturday field session, he stands on one side of a "stream" that is actually a blue tarp with several rocks strewn on top. The rocks offer the young hunters a tempting opportunity for crossing. Fifty yards downstream, a log stretches from bank to bank. Witt tells the students to imagine there is a bridge half a mile downstream.

"Where are you going to cross?" he shouts across the stream. A young hunter carrying his rifle yells back, "I'll cross down at the bridge. The rocks might be tippy. The log could be slippery or rotten."

"Good," says Witt, smiling. "Go ahead and cross the bridge, and show me how to carry your rifle when someone's walking in front of you."

Like Larrson, Witt's motivation for teaching is safety. Yet his is even more personal: He was once shot by an unidentified hunter. "I was up by Townsend hunting elk," he recalls. "I had my horse painted orange, and I had orange overalls on. All of a sudden I felt what was like a bee sting. My horse dropped over dead. When I tried to stand up my leg collapsed. I looked down and blood was pouring out of a bullet wound. I finally hobbled four miles down off the mountain and drove to the hospital. I don't remember another thing for three days. It took six months to get to where I could use my leg. That's one of the reasons I teach. It's my way of trying to make sure one of these young hunters doesn't shoot somebody."

TRADITION

Another reason people say they teach hunter education is to give something back to an activity that has provided them with so much. That's the main motivation for George Clement, an instructor since 1998. At Belgrade's Saturday field session, Clement stands next to a pickup bed lined with rifles. He's teaching and testing students on different firearm actions and safeties, how to take rifles in and out of vehicles, and what a bullet can do to a pickup.

Clement hands one young hunter a thick piece of iron punched through by a bullet hole. Many youngsters, he explains, don't understand the immense power of a rifle. "If a bullet will go through this, what else will it go through?" he asks the student, then provides an answer that gets the class thinking: "A truck door?"

The punctured iron is one of Clement's biggest eye-openers. He says it gets the young students thinking more like adults.

"I grew up with firearms," he says. "It's a tradition that was handed down to me. But not all kids get that these days. So that's what I'm doing, passing on the tradition, giving back to the sport."

Passing on a hunting tradition—whether of safety, heritage, or ethics—is a strong motivating factor for many instructors, says Baumeister. "At some point in their hunting lives, many hunters want to give something back," he says. "Because our program capitalizes on this desire by hunters to become involved, we almost never have a problem recruiting enough instructors."

RESPONDING TO CRITICISM

John Plenke oversees the Saturday field session, moving among test stations to check on the students' progress. Now retired, Plenke began his career in 1966 as a conservation warden in Wisconsin and eventually became the chief administrator of that state's Hunter Education Program. He has been a volunteer in Montana since 1994.

Over the past 39 years, Plenke has seen great changes in the way hunter education programs are promoted and conducted, particularly in response to public criticism that hunters are irresponsible, unethical, and a threat to wildlife.

"When hunter education started in the 1960s, the emphasis was on safety," Plenke says. "But in the mid-1970s, we also emphasized the importance of hunting responsibly and showing respect to landowners and nonhunters, to wildlife and their habitats, and to rules and regulations."

Plenke believes that hunters need to understand they are ambassadors of their sport, and that safe and ethical behavior is one reason nonhunters continue to tolerate hunting.

Nancy Vautier, who is in charge of shotgun safety during Saturday's field session, is another instructor who wants to protect the future of hunting by instilling in beginners a respect for safe and ethical conduct. In one drill, she uses a football to represent a game bird, throwing it over young hunters and having them decide whether it's "flying" in a place where it would be safe to shoot.

"I so strongly believe in hunting that I'm happy to be an instructor," Vautier says. "I want to keep hunting going, bring new people into it. It's worth a little time out of my life to do that."

YOUTH TEACHING YOUTH

Though older hunter education instructors may have decades of experience and wisdom, students often relate better to junior instructors, who look and talk like they do. Junior instructors Jason Mills and B.J. Clement stand before five students at the Saturday field session, holding up antlers and horns and asking if anyone can identify the specimens. Though still teenagers, Mills and Clement talk knowledgeably and authoritatively about the animals. The students listen attentively.

"Our older instructors have come to realize it's often better for young hunters to be taught by their peers," says Baumeister. "The student response is pretty positive when a 14- or 16-year-old junior instructor talks seriously about safe firearm handling and other aspects of hunting."

Some junior instructors got involved with hunter education because other family members were instructors. "I started doing it because Dad was involved," says Jason Mills. "My little sister, Rachael, is gung-ho about hunting, so she started teaching. Then Mom started because she wanted to see us during the week we conducted the course. Now we all teach classes, and when we get home, we talk about what happened."

B.J. Clement has been helping out with Belgrade's Hunter Education Program for

Freelance writer Sam Curtis, of Bozeman, tagged along as his son Will took FWP's hunter education course in 2004. Freelance photographer Adam Van Zee lives in Bozeman.

EARNING EXTRA CREDIT Far left: Instructor Diana Salvia explains how to safely handle a firearm. Left: Instructor Rob Miller congratulates a student for hitting the bull's eye at a firing range. Right: Instructor Max Witt leads students in an exercise on safely crossing a "stream" while carrying a firearm. Many hunter education instructors say that creating safe, ethical hunters and passing on the hunting tradition are their main motivations for volunteering year after year.

two years; his brother, Buddy, has been assisting for four years; and his father has been an instructor for six.

"It makes it a little more special to be teaching hunter education with my boys," says George Clement.

REWARDS

Although instructors donate considerable time and energy to Montana's Hunter Education Program, most will say the benefits are well worth the effort. "It has been rewarding," says Larrson, who jokes that he's just too lazy to quit after teaching so long. "I've had young students come to me and say, 'You taught my grandfather.' And I've had many former students sit in on the course when their children or grandchildren were taking it."

Another factor keeping instructors glued to the program is the positive and eager attitude of the highly motivated students. "These young adults take the hunter education course because they want to, because they're interested," says Howard Pippin, who has been an instructor in the little Hi-Line town of Saco for 38 years.

Another reward is having former students tell about their hunting experiences. "Sometimes, a former student will see me and talk, with a big smile, about his hunt," says Plenke. "The other day, I ran into a fellow at the mall who said, 'I was one of your students. It's still the best course I ever took.'"

In addition, says Baumeister, hunter education instructors attain a high level of respect in their community. "Social status and recognition are attached to being the local hunter education instructor," he says. "In a different time or different culture, that same person would be the chief hunter who provides for the sustenance of the clan."

Baumeister says the tribal, ritualistic aspect of hunter education applies to the students, too. Many young participants in hunter education classes see the course as a rite of passage into adulthood.

"That attitude is becoming increasingly rare across the country," Baumeister says, "but not in Montana. In many parts of this state, when young people turn 11, they take the hunter education class. There's no question about it."

Just as the reasons for becoming a hunter education instructor are varied, so are the ways instructors teach their classes. Baumeister notes that FWP allows a great deal of flexibility in how instructors get their messages across. But he adds that the department maintains strict standards for accepting instructors, and it checks instructor applicants for criminal records and hunting and fishing violations. FWP also requires that screened applicants apprentice for a year under the guidance of experienced instructors. In addition, the department develops educational materials and provides instructors with the basic objectives the students need to learn.

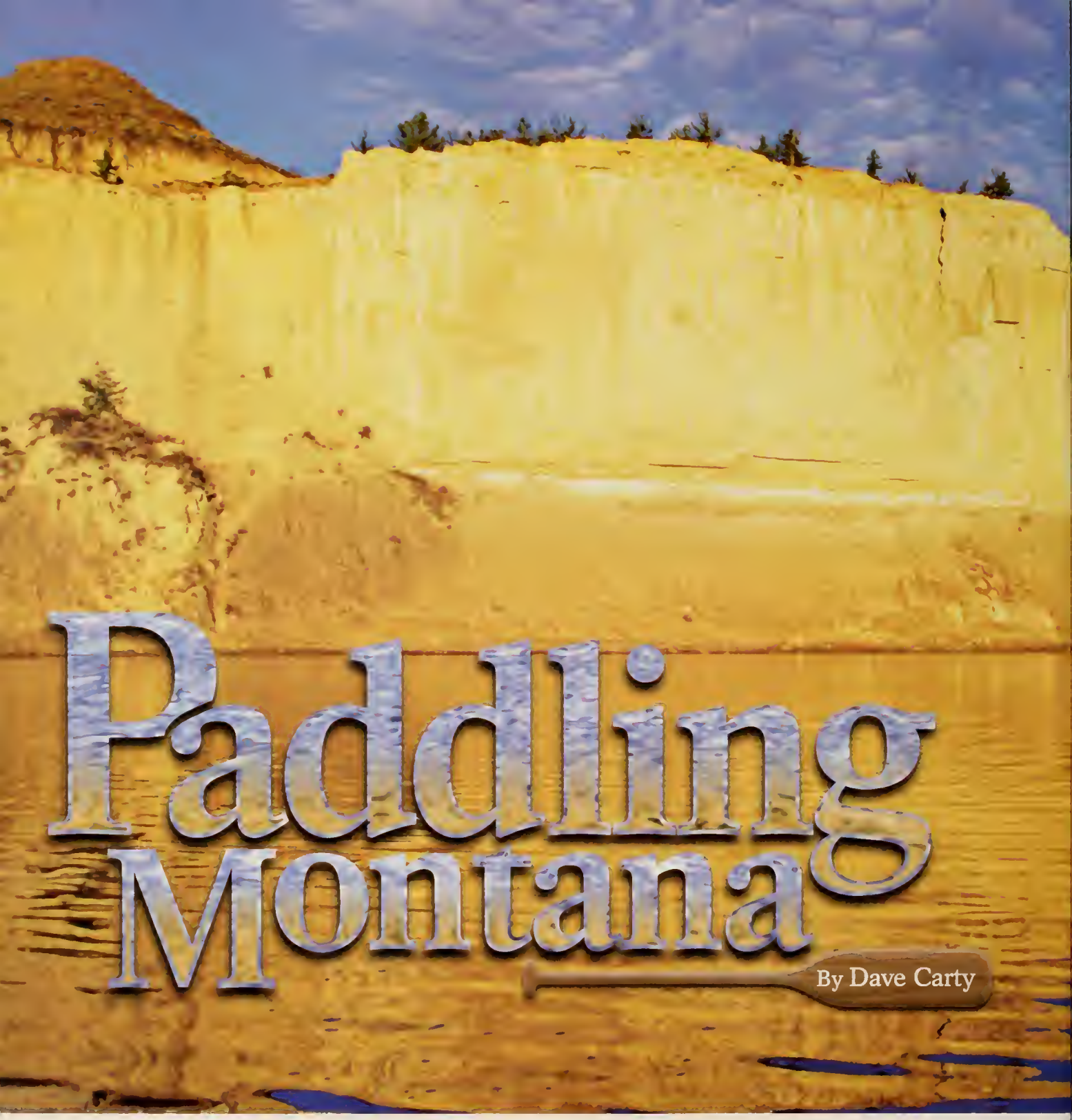
According to Baumeister, the citizen-agency partnership between FWP and volunteer instructors has broad public support.

"People like it because it's an extremely effective way to get things done," he says. "FWP devotes less than two full-time positions to run and coordinate the entire program. But thanks to our citizen instructors, we certify about 10,000 students each year."

He adds that while FWP continues to look for ways to improve the program, the conservation agency remains committed to using volunteers.

"Our challenge," Baumeister says, "is to find better ways to meet the interests and needs of young hunters without sacrificing the core element of one-on-one instruction that has been so successful."

Find nearby hunter education classes on the FWP website (fwp.mt.gov). Click on "Education," then "Hunter Education," then "Hunter and Bowhunter Course Schedule." The site lists cities, dates, class locations, and contact people and their phone numbers. Or call FWP at (406) 444-3188.



Paddling Montana

By Dave Carty

a beginner's guide to canoeing the scenic and historic rivers of Big Sky Country

It wasn't much of a rapids. But we had an audience—another party had pulled out on the gravel bar below us—and my friend and I thought we'd show them our stuff. From the back, I stuck my paddle into the water and began steering the canoe into the current while Bill, in the bow, began pulling the front around.

The rock caught us both by surprise. In disbelief, we felt the boat hesitate for an instant, balanced on a boulder like a see-saw on a fulcrum. Then, with a *whoosh*, the upstream side of the canoe dipped under, the craft filled with water, and into the chilly river we went. The two of us thrashed around for a moment and then found our footing. Fortunately, the water was less than a foot deep.

It turns out Bill and I had violated the second rule of canoeing through rocks:

CANOEING THE WHITE CLIFFS PORTION OF THE WILD AND SCENIC MISSOURI RIVER BY CHUCK HANEY

When the canoe gets hung up and turns sideways, always lean over the downstream gunwale (side of the canoe), not the upstream gunwale. And the first rule? Avoid rocks.

The man who explained this to me is Terry Johnson, a 65-year-old canoeing expert from Bozeman. Johnson began paddling in Montana in 1959, when he and a friend ran the rapids-filled Yankee Jim Canyon on the Yellowstone River in a wood-and-canvas canoe—something few people had ever tried before. Since then, Johnson and his boats have been just about everywhere. One river has led to another, and last year he and several companions canoed China's Yangtze River. Despite having paddled some of the world's greatest whitewater, Johnson told me he can't think of a better place for a canoeist to live than in Montana.

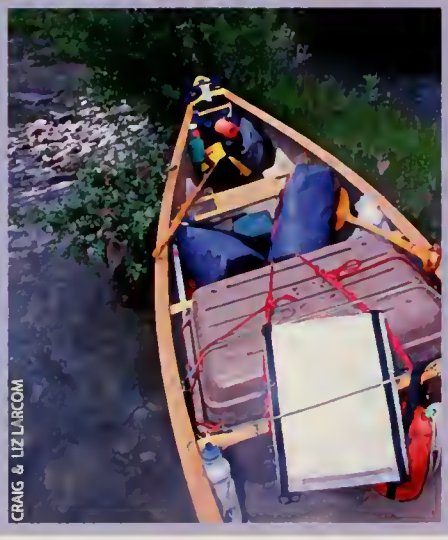
MANY PLACES TO PADDLE

Johnson holds that view because Montana offers an enormous diversity of river types, settings, and experiences. Some, like the Big Hole, are known nationwide for their excellent trout fishing. Some, like the Middle Fork of the Flathead, have roiling whitewater that attracts thrill-seekers. Others, like the Missouri, offer leisurely floats through sagebrush steppes. Montana

CRAIG & LIZ LARCOM

RAPID RECOVERY One of the thrills of canoeing is negotiating whitewater. Beginners with a basic understanding of steering can handle some rapids, though stretches like the one shown above are best run by experienced paddlers only.

CANOE CAMPING The most essential equipment—besides PFDs and paddles—are dry bags or other waterproof containers securely lashed to the canoe (right). The scenic Smith River (far right) is an increasingly popular destination for multi-day canoe trips.



CRAIG & LIZ LARCOM

JEFF FRICKSON

contains 6,400 miles of navigable water, all of it open to public use thanks to the state's 1985 stream access law. The law says that all streams and rivers "capable of recreational use" may be used by the public, no matter who owns the streambed, as long as there is public access to the stream.

Most Montana rivers can be run by those with basic canoeing skills. The state has relatively few waterfalls or dangerous rapids, even though many rivers run through mountainous terrain. For those who prefer to paddle in still water, there are dozens of lakes and reservoirs, including the sealike Fort Peck and the sparkling, mountain-flanked Flathead.

To top it off, Montana offers all this and relatively uncrowded paddling when compared to the traffic jams on other states' waters. Though no one in Montana keeps canoe participation records, many veteran canoeists maintain that the number of people paddling in this state actually appears to have declined over the past 20 years.

"It's hard to believe, considering how popular Montana has become, but for all the cars I see carrying canoes and kayaks, I don't seem to see many people on the water," says Doug Monger, chief of the Montana Fish, Wildlife & Parks State Parks Division and an avid canoeist.

CANOEING BASICS

Like any water sport, canoeing can be dangerous—even for experienced paddlers. "I remember one time we hit a big, long log jam on the Bitterroot," says Johnson. "I went under and was hanging onto my canoe by two fingers to keep from getting dragged deeper. Those two fingers hurt for half a year after I pulled myself up out of the current."

Most canoe trips don't end with a dunking. But just in case, canoeists should wear a life vest (personal flotation device, or PFD), be able to swim, and understand the hazards of moving water and hypothermia. Life vests designed for canoeing and kayaking are lightweight and have wide arm holes for full-range-of-motion paddling. Avoid those old orange, puffy life vests, which bunch up around the wearer's head when in the water.

One of the great things about canoes (and also one of the bad things) is there are so many varieties to choose from. As is generally true elsewhere, the more you pay, the more you get. That doesn't mean you have

Dave Carty is a freelance writer in Bozeman.

Suggested Paddling

JEFFERSON RIVER: The stretch from Silver Star to Cardwell is perfect for an overnighter. Home to sandhill cranes, eagles, songbirds, and loads of other wildlife, the stretch is best run in early or midsummer. After that, the fishing slows and water flows can drop to a trickle. You'll need to portage around the diversion dam below Parson's Bridge and the one at Parrot Castle Fishing Access Site.

MISSOURI RIVER: The most popular stretch on this well-known river is from Coal Banks Landing below Fort Benton to the Fred Robinson Bridge on U.S. Highway 191. This five-day trip includes the scenic White Cliffs area, abundant wildlife, and a chance to see what the Corps of Discovery saw two centuries ago. Bear in mind that over the next two years this stretch might be jammed with Lewis and Clark buffs retracing the explorers' route.

KOOTENAI RIVER: The 15-mile float from Libby Dam to Libby is a great one-day outing. The mountainous scenery here is spectacular, and the paddling is fairly easy except for Jennings Rapid, just below where the Fisher River enters, about 4 miles down from the dam. Beginners will want to walk around that one. Also, it's experts only on the Kootenai downstream from Libby, which contains the challenging China Rapids and Montana's largest waterfall, Kootenai Falls.

CRAIG & LIZ LARCOM

PLENTY TO PADDLE Montana contains 68 floatable rivers totalling 6,400 miles. Many, like the Clearwater (above), provide easy paddling for beginners.

TONGUE RIVER: This is a prime eastern Montana float. You'll find easy paddling from below the Tongue River Reservoir to its confluence with the Yellowstone at Miles City. This stretch has plenty of warmwater game fish, including channel catfish, smallmouth bass, northern pike, sauger, and walleyes. This is ranch country, so keep your eyes open for diversion dams and barbed wire.

JUDITH RIVER: Few canoeists seem to know about this beautiful central Montana river, probably because it flows through ranchland for most of its length. The biggest drawback to canoeing the Judith is that it only contains enough floatable water in June, during runoff; otherwise it's too low.

—Dave Carty

to buy your canoe new, however. I purchased my 17-foot touring canoe, used but not abused, for a few hundred dollars—about half what it would have cost off the shelf—and that included knee braces, extra seats, and a shoulder yoke for portages.

Which canoe is right for you? The longer 17- and 18-foot two-seat ("tandem") canoes hold more gear and usually are fast and easier to paddle, but they don't turn well. Short, wide canoes are generally more stable but are harder to track, which means you have to work more to keep them going straight. Most commercially manufactured canoes are made of Royalex or polyethylene plastics (midweight, sturdy, mid-priced), Kevlar (light, expensive), or fiberglass (heavy, sturdy, least expensive). A great option for those looking for an inexpensive canoe is to check the classified ads for a used aluminum or fiberglass one like those some of us grew up with in Boy Scout camp. The main disadvantages of these canoes are that they are too heavy to portage far, and the aluminum ones clang loudly when bumped with a paddle.

The only other essential gear besides a life vest is your paddle. Paddles range from inexpensive aluminum and wooden jobs to high-tech, bent-shaft models with balanced graphite shafts. If you canoe only a few times a year for short distances, the cheaper ones will work fine. The pricier models are lighter and more energy efficient for longer trips. The choice is up to you, but you'll need at least three paddles—one for the stern paddler, one for the bow paddler, and a spare in case someone accidentally loses theirs.

Canoe rental is another option. You can rent a two-person canoe, paddles, and PFDs at outdoors stores in towns near major rivers for roughly $40 per day. It's a good way to try out different canoe sizes and types.

If you plan to canoe-camp, you'll want gear that allows you to relax after a hard (or not so hard) day of floating, paddling, and fishing. Top priority is to buy a few vinyl-lined "dry bags," which keep your gear dry in case it rains or your canoe swamps. I also bring a lightweight tent, ground cloth, gas stove, synthetic sleeping bag in a waterproof stuff sack (which is stuffed inside a dry bag, just to be safe), rain gear, a change of clothes, and basic toiletries. One other essential: a spare pair of shoes, just for camp. Nothing feels as luxurious as slipping into a pair of dry sneakers after paddling all day with wet feet.

One of the great advantages of canoe tripping compared to backpacking is that you don't need to pay meticulous attention to gear weight. That's why most of the canoe trips I've been on have included various personal indulgences. I wouldn't float anywhere without an inflatable camp seat, for example, or a small solar shower. And when canoeing eastern Montana rivers, I always throw in a tube of hand lotion. My fair skin feels like alligator hide after a day of dipping my hands and arms in the highly alkaline water, an irritation the lotion soothes in seconds.

Monger says his canoe-trip necessities include a book of Robert Service poems, his favorite coffee mug, and a camp chair that allows him to "sit on the bank in the evening and enjoy the river."

RIVER MEDITATIONS

The main advice Monger offers to would-be canoeists—besides being careful to not capsize—is to not canoe too far in one day. Dawn-to-dusk paddling leaves little time to enjoy the scenery or other parts of the canoeing experience.

"I really don't enjoy going out with people who say 'Let's do that 24-mile stretch of the Missouri today,'" he says. "I tell them, 'Let's do that *12-mile* stretch and see how it goes. If it feels good, then maybe we'll do the other 12.' I race canoes, but recently I've also learned how enjoyable it can be just to canoe for the movement of canoeing, to watch wildlife and water go by, and escape my busy life. People who try to pad-

PLEASURE CRAFT Some canoeists use their boats to reach fishing waters far from shore (above). But most simply paddle for the joy of being on the water (right). Canoeing is great exercise, fun to learn and master, and takes you to scenic spots inaccessible by roads or trails. Because it's done on the water, however, canoeing comes with risks. Anyone who canoes should be able to swim and should wear a life vest (personal flotation device, or PFD). Some communities offer classes on canoeing safety, where you can learn how to enter a swamped canoe (left), steer around rocks, and survive a dunking in cold water.

dle too far in one day are missing the trip."

Monger knows firsthand how that goes. He and his friend Steve Gilbert once paddled 120 miles of the Smith River—in a single day. It took them six and a half hours for the first 60-mile stretch. Then, after being shuttled back upstream, they did it all over again in seven hours. As far as Monger knows, the feat has never been equaled. "Please don't try that one," he says. "Then I'd have to go back and do it again, faster, and that would be just awful."

Canoeing fanatics sometimes do things that amaze the rest of us. Take, as another example, Bill Bartlett and Kay Ruh of Bozeman, who paddled nearly the entire length of the Yellowstone a few years ago. The pair is currently retracing Lewis and Clark's journey up the Missouri by paddling the stretch from Fort Buford, North Dakota, to Three Forks, Montana. And they're doing it the hard way, paddling upstream, one weekend at a time. They've been at it for five years.

"About 25 miles in one day is the most we've done," Bartlett says.

"We're also done as little as 5 miles in a day," adds Ruh. "It depends on our condition and the wind."

On the broad, flat Missouri, the wind can turn a moderate upstream paddle into a nearly impossible battle to make any headway. When the wind blows hard, Bartlett and Ruh are forced to retreat to shore and use ropes to pull (or "line") their single-person canoes upstream along the slack water near shore.

Whenever possible, however, the pair tries to travel in the water. Rattlesnakes, sharp rocks, prickly peat cactus, and other hazards make a shoreline trek along the Missouri treacherous. To paddle upstream in stiff currents or hard wind, they pay close attention to the water.

"We will actually look for any break in the surface of the water, any eddy line, that provides even a few yards of easier paddling," Ruh says. "We often paddle so close to shore that we disturb a lot of carp, which sun themselves in the shallows. Spooked carp will usually swim upstream, so we'll actually ride along behind them in their wake."

She jokes that if she and Bartlett ever write a book about their experiences, one chapter will be called "Follow That Carp!"

Another great appeal of canoeing in Montana is the link its rivers have to western history. Canoe down the Marias and consider Lewis and Clark's agonizing decision there in 1805. While paddling the lower Yellowstone, stop to see Captain Clark's graffiti on nearby Pompeys Pillar. A trip down the Missouri River near Great Falls cuts right through C. M. Russell country, and the Bighorn River runs just a few miles past where General George Armstrong Custer made the greatest miscalculation of his life.

And that's just for starters. Montana rivers run through the heart of the state's gold and copper mining regions, wilderness areas, Indian and fur trapper country, and two national parks. With the Lewis and Clark Bicentennial now underway in Montana, many residents and visitors are discovering the state's diverse and scenic rivers and the joy of traveling those wonderful water routes by canoe.

Want to know more about canoeing lore and Montana rivers? Look for the classic books *Path of the Paddle* and *Song of the Paddle*, both by Bill Mason; *The Wilderness Paddler's Handbook*, by Alan S. Kesselheim; *Paddling Montana*, by Hank and Carol Fischer; *Basic Essentials Canoeing*, by Cliff Jacobson; and *Floating and Recreation on Montana Rivers*, by Curt Thompson.

One wild ride

By Tom Dickson

In our younger days, "Road trip!" was a rallying cry to high adventure. But few of those highway outings can compare to the wild ride Stella Capoccia led last October.

Capoccia runs FWP's Montana Wildlife Center, which rehabilitates injured and orphaned bears, deer, elk, moose, and other critters. She and two volunteer helpers drove 1,000 miles from Montana to deliver a pair of grizzlies to the San Francisco Zoo, which had agreed to place the animals in its new bear exhibit.

The grizzlies had originally come from the Rocky Mountain Front near Choteau. Their story is similar to that of many grizzlies spreading east from the Northern Continental Divide Ecosystem, stretching from Glacier National Park south to the Blackfoot River. Over the past decade, grizzly numbers in that region have slowly grown. In search of new habitat, bears have been moving east down into the foothills of the Rockies. There they run into ranches and tempting food such as livestock carcasses, sheep, and grain.

In spring 2004, the grizzlies' mother had to be killed after repeatedly raiding grain in a farmer's barn. The twin cubs, both females, returned to the ranch and picked up where Mom had left off. Mike Madel, the FWP grizzly management specialist at Choteau, sent out word that he'd have to trap the 20-month-old bears and find them a new home. Geof Foote, a rancher and conservationist in Ovando with contacts at zoos throughout the United States, called the San Francisco Zoo, learned it would be willing to take the bears, and called FWP.

"It's getting increasingly difficult to find homes for grizzlies," says Capoccia. "They are big animals that require a lot of space and food and will live roughly 25 years. When the San Francisco Zoo said yes, that was great news."

There was one big hitch—getting the bears to California. "It's against airline regulations to transport two animals together," explains Capoccia. "And we didn't want to separate the twins because they'd get upset and maybe escape from their containers. The only thing worse than an angry grizzly loose on the ground is a grizzly loose in an airplane at 30,000 feet."

FWP officials decided that Capoccia should drive the bears to California. But that was no simple endeavor.

"We had to rush to get official clearance from federal and state conservation agencies for each state we drove through, because grizzlies are an endangered species and a top predator," she explains. "If there was an accident and the bears got loose, it would have been a huge problem."

With the paperwork arranged, Capoccia and volunteers Lynne Burkhardt and Arlene Hedlund loaded the bears into a large culvert trap in the back of an FWP pickup. Well before dawn on October 15, after finding room for 100 pounds of dog food, 3 bushels of apples, 20 pounds of game meat—then squeezing in small day packs for the drivers—the trio headed south to Salt Lake City then west on I-80.

The driving went smoothly enough, says Capoccia, with the three women rotating driving duty during the 18-hour trip to San Francisco. It was at gas stations that things got a little wild.

MONTANA FWP

"EASY, GIRLS" Stella Capoccia talks soothingly to the twin grizzly cubs as San Francisco Zoo staff members prepare to unload the culvert trap.

"When we'd stop, the bears knew they'd get fed," Capoccia explains. "So they'd get all excited and start howling and sticking their paws out of the culvert trap."

That, of course, attracted attention. "At some gas stops there'd be a dozen or more people crowded around us, asking what was in the culvert trap and what we were doing," Capoccia says. "Everyone was really excited to learn about the bears."

The first night was spent with a friend of Capoccia's who owns a horse ranch in northern California. "We parked the bears in their indoor arena, crashed, then left early the next morning," Capoccia says.

The closer they got to San Francisco, the wilder things became. Once within the metropolitan area, traffic became stop-and-go, and the bears grew increasingly agitated with each mile on the multilane freeway. Other drivers honked and rolled down their windows, calling out to the Montana vehicle.

"The bears were hollering and complaining, and cars three lanes over could hear them," Capoccia says. "It was like a one-truck circus had rolled into town."

Once they arrived at the zoo, a media frenzy commenced, as local TV and radio stations scrambled to interview Capoccia and photograph the city's newly arrived bear celebrities.

The grizzlies, though somewhat frazzled by the traffic and commotion, were certified as healthy by the zoo's veterinarian. Then they were placed in temporary quarantine before being moved into their new digs—a roomy 1-acre bear area where they can run, play, climb trees, and breath in the Pacific air. The zoo, considered one of the best in the United States, employs an experienced bear keeper who, says Capoccia, was thrilled to have two healthy grizzly bear cubs to fill out the exhibit.

Their mission accomplished, Capoccia and her helpers headed back to Montana.

"What stands out when I think about that trip is how great people were the whole way," she says. "They offered to help, they asked questions, they cheered us on. It was as if everyone we met was rooting for those two grizzly bears to make it, to find a home. And you know what, they did."

Tom Dickson is editor of Montana Outdoors.

GATEWAY to FORT PECK LAKE

At Hell Creek State Park, visitors find a portal into one of Montana's great water recreation areas

By Mark Henckel

My wife must worry a lot about me starving to death when I camp and fish at Hell Creek State Park.

"Did you remember the food cooler?" she always asks.

"Yes, I packed the food cooler."

"Do you have eggs, bacon, coffee for breakfast, and enough meals packed for dinner?"

"It's all packed."

"Got the butter, bread, some lunch meat, and diet pop?"

"It's all there, and the cooler weighs about 100 pounds!" I tell her.

The thing is, she doesn't need to worry. I hardly need a food cooler on my trips to Hell Creek State Park. The other people camping there are so hospitable, it seems I just snack my way from one campsite to the next, having a cold beverage here, a fish supper there, and a piece of cake on the way back to my camper.

If Hell Creek isn't the friendliest place in the entire Montana state park system, it must come awfully close.

Maybe that's due to the park's remote setting, on the shores of Fort Peck Reservoir, north of Jordan, near the end of a 25-mile-long gravel road. Or maybe it's because the park is a destination point, where everybody packs huge amounts of food and drink for several days of camping.

Or maybe it's because Hell Creek just seems to bring out the best in people. The park is a gateway to good fishing, superb boating, comfortable camping, and spectacular scenery. And the hills of

the surrounding C. M. Russell National Wildlife Refuge and the 1,500 miles of lake shoreline (longer than the entire California coast) offer the peace and solitude that let a person truly relax, reflect, and feel more neighborly toward others. And offer them food—loads of food—as they wander past.

THE BIG DRAW Walleyes are the main attraction at Fort Peck Lake, drawing anglers from across the United States. FWP originally stocked the tasty fish in the 1950s, but not until the mid-1990s did the lake become a major walleye angling destination.

WALLEYE BY DUSANSMETANA.COM

A family destination

Old-time Hell Creek regulars say the site has always been hospitable. Families have come here for decades to enjoy fishing, camping, getting away from it all, and making friends. Karmie Lockie, postmaster at Sand Springs in western Garfield County, is a third-generation Hell Creek regular who still spends as much time as possible at the nearby family cabin. She recalls that, in the 1950s, the road from Jordan to Hell Creek was entirely gumbo. "When I was a kid, we couldn't go home when it rained," Lockie says. "The road was that bad. We had to stay at the lake—which was fine with us kids."

John Little, who grew up in Glasgow, also has fond memories of visiting Hell Creek as a youngster. His family boated there from its cabin at the Pines, an area with campsites, cabins, and a boat ramp located 25 miles east of the park.

"After striking out for Hell Creek on a Saturday morning, we'd all bet whether the boat would make it there or not," says Little, Montana Fish, Wildlife & Parks regional state parks manager in Miles City since 1990. "Sometimes the motor quit, and sometimes it didn't. If we got there, we kids would sleep on the beach and our folks would sleep in the boat."

The walleye boom

Little took his FWP job just as the walleye fishing at Fort Peck began to boom. Due to lack of forage and spawning habitat, the lake's walleye population languished until the mid-1980s. That's when Walleyes Unlimited of Montana teamed up with FWP to stock Fort Peck with ciscoes, a cousin of trout. The oil-rich salmonids are the fish equivalent of double cheeseburgers, allowing predator species to quickly put on pounds. "We stocked ciscoes to improve the overall size and condition of walleyes, and we figured they'd also help northern pike, lake trout, Chinook salmon, and maybe smallmouth bass," says Mike Ruggles, FWP's fisheries biologist for Fort Peck.

Before the cisco introduction, Ruggles says, the few Fort Peck walleyes that reached more than 24 inches long were relatively thin fish that grew slowly. But once the walleyes had ciscoes for supper, they began growing longer, stouter, and faster. By the early 1990s, local anglers took notice, and within a few years the word was out nationwide.

"Fort Peck has developed into a trophy walleye fishery," Ruggles says. "It's one of the few lakes right now regularly producing walleyes over 10 pounds."

As predicted, other game fish also have benefited from the cisco introduction. Five-pound smallmouth bass are not uncommon, and each year anglers catch northern pike and lake trout over 20 pounds and Chinook salmon up to 30 pounds.

Ruggles notes that fish populations rise and fall on Fort Peck based on the amount of habitat and prey available. The current ongoing drought, which has helped drop the lake's water level to record lows, has hurt the fishery.

"Biologically, we need fluctuations in the water levels," Ruggles explains. "We need years when the water is lower, so vegetation can grow on the exposed shoreline, and then we need years of high water to flood that new vegetation. Northern pike, in particular, need flooded vegetation to spawn on, and the young of all fish species hide in vegetation. An extended drought like we have now is hard on fish populations."

Ruggles adds that higher water would also provide more habitat for shiners and perch—both walleye prey—thus drawing walleyes closer to shore where they could be more easily caught by anglers who now struggle to find fish in Fort Peck's depths.

A bigger, better park

Changes in the lake's walleye population have spurred changes at Hell Creek State Park. As the Fort Peck fishery improved, angler use steadily grew, until the lake now has become the most heavily fished water in Montana. Park use has increased rapidly, too. In 1995, roughly 9,300 people visited the park; by 2003 the number of visitors had nearly quadrupled.

Little says he and his staff have responded not only to increased numbers, but also to new Hell Creek visitors who aren't local. People camping at the park now hail from the Dakotas, Nebraska, and Minnesota as much as from Miles City, Billings, and Great Falls. Rather than sleep on the beach or in a boat like Little and his folks did, the out-of-staters roll into the campground with travel trailers or motor homes, most with a high-tech walleye boat or pleasure craft in tow. They stay for extended weekends, an entire week, or even longer.

That has required some major improvements at Hell Creek, and Little quickly ticks off the long list.

"We improved both the main and the Boy Scout Point boat ramps, and extended the main parking area," he says. "Then in the 1990s, we put in a drinking water treatment plant, re-did the roads, and put in camper pads in the campground. The last 5 miles of road on the CMR National Wildlife Refuge to the park was improved and graveled. And in 2000, we teamed up with Walleyes Unlimited to put in a fish-cleaning station."

The fishing group also put in a kids' playground, Little adds, and in 2001 FWP installed an RV dump station. The following year, the agency built a new shower facility with washrooms and restrooms.

"Then, last summer, we planted dozens of trees and installed an underground watering system," Little continues. "And in the fall, FWP and Garfield County received federal and state money to add additional gravel to another 12-mile segment of the road from Jordan."

Little points out that rumors the Hell

"We extended the Hell Creek boat ramp last year and again this past winter. Boats have no problem reaching the water."

—John Little, FWP regional parks manager

Avid walleye angler Mark Henckel is the outdoors editor at the Billings Gazette.

MARK HENCKEL

MARK HENCKEL

ANGLER OASIS Hell Creek State Park (above) offers fishing families everything they need: campsites, boat ramps, picnic tables, an RV dump station, shade trees, showers—even a playground. Though walleyes (right) and northern pike (left) are the featured species, the lake also offers fishing for smallmouth bass, ling, lake trout, and even salmon.

Creek boat ramp no longer reaches Fort Peck's low water are untrue. "We extended the boat ramp last year and again this past winter," he says. "Boats have no problem reaching the water."

As extra insurance, the U.S. Army Corps of Engineers is installing a new, low-water boat ramp in the spring of 2005.

The privately owned Hell Creek Marina also has expanded its operation. In addition to on-the-water gas pumps, mooring dock slips, and pontoon rentals, the marina sells fishing tackle, groceries, beverages, and bait. It also rents air-conditioned motel units.

The marina serves breakfast, lunch, and dinner, but the staff will also cook your freshly caught and cleaned fish fillets for just $2.50. The marina is open year-round, serving anglers in spring and summer, mule deer and elk hunters in fall, and ice anglers in winter.

Meeting future needs

As more and more people visit and camp at Hell Creek, FWP's state parks staff has had to scramble to provide the high level of services demanded by park visitors. Doug Monger, who heads the department's State Parks Division, knows firsthand of the changes at Hell Creek, having previously held the regional manager position.

"When I started, Hell Creek was a tough place to get to," Monger says. "But that's all different now, and I can see the park getting even better for visitors in the future."

State park employees are starting to kick around the idea of paving the road north from Jordan. "Maybe a mile or two every few years," says Monger. "It would depend a lot on what type of funding we could get. But it makes sense. Gravel disappears into the clay, and we constantly have to pay to have it re-graveled. A paved road is more expensive, but it stays."

Another proposed improvement is electricity. "It's hot there in the summer," says Monger. "People want to run an air conditioner in their camper, or, if they don't have air conditioning, they don't want to hear gas-run generators going all day. People also want to recharge their boat batteries."

Currently, no Montana state park has electricity. "But if electrical hookups are what people want at Hell Creek, we should at least look into it," Monger says. He adds that no solid plans are in place for either the road-paving or electricity proposals.

Despite all the changes at Hell Creek, one thing that has remained the same in the 20 years I've been going there is the park's aura of hospitality. People—including the folks at FWP—seem to love Hell Creek and will do whatever it takes to make it a better place to visit. That could mean someday paving the road from Jordan. It could mean extending the boat ramps. Or it could be nothing more than offering someone a cold beverage, a fresh-caught walleye dinner, or a piece of cake—causing yet another cooler to return home much, much too full.

Hell Creek State Park

CHRISTOPHER MASTO

IF YOU GO

Open: Year-round, 24 hours a day.

Location: 25 miles north of Jordan on graveled Hell Creek Road.

Services: Fishing, swimming, boating, wildlife watching, 55 graveled camp pads, group campsites, 60 fire rings, 120 picnic tables, hot showers, RV dump station. Marina (406-557-2345; hellcreekmarina.com) has lodging, restaurant, groceries, bait, boat rental, fishing gear, and firewood.

Special events: Several fishing tournaments are held in spring and summer. Call (406) 234-0926 for details.

For more information: Call the FWP regional parks office at Miles City, (406) 234-0900, or go to the state parks page of the FWP website (fwp.mt.gov). Get the latest information on fishing, walleye management, and lake conditions at the Walleyes Unlimited of Montana website (walleyesunlimited.com).

Meeting the Challenge

How a nationally recognized, landowner-led conservation group is protecting both the natural resources and rural lifestyle of the Blackfoot Valley

BY SAM CURTIS

"Ho girls, easy." Geof Foote stops his team of Belgian horses at a pile of toppled ponderosa pines. The Blackfoot Valley rancher has selectively cut these trees from a woodlot to improve its long-term health. Beyond the dirt track, sunlight shimmers off shallow wetlands on Meadow Springs Ranch, owned by Foote and his wife, Kathie. By using horses rather than tractors to cut hay, plow fields, and move logs, Foote lessens noise, air pollution, and, most importantly, damage to wet meadows on the 960-acre ranch. It's just one way this trained biologist, formerly director of an environmental education foundation, operates his ranch with one eye on the bottom line and the other on wildlife habitat.

Some of Foote's ranching methods are more akin to those used in the 1890s, when Meadow Springs was homesteaded, than in the 21st century. A few neighbors puzzle over Foote's ways, but the local wildlife don't seem to mind. Sandhill cranes, Canada geese, and black terns, all mostly absent 25 years ago, have returned to the roughly 100 acres of lush wetlands the Footes have restored, as have otters, Cooper's hawks, and four owl species. Trout swim in restored meanders of a Blackfoot River tributary running through their land. The Footes' spring-fed prairie teems with diverse native vegetation. And a perpetual conservation easement prohibits future owners from subdividing or otherwise developing this spectacular setting.

River valleys throughout Montana are filling up with trophy homes and housing developments. In recent years, many parts of the state have seen double-digit annual growth, much of it centered on riverside lots. Not only has growing development harmed riparian fish and wildlife habitat, it has also altered the scenic ranching landscape for which Montana is famous.

LIGHT FOOTPRINT By using horses rather than tractors, Blackfoot Valley rancher Geof Foote protects fragile wetlands on his property.

That's not true in the Blackfoot Valley, however. The Footes and several dozen other ranch families along the renowned river have found a way to work with private and public agencies to accommodate fish, wildlife, and open space—while still retaining productive farm operations and long-held ranching traditions. Over the past two decades, this remarkable private-public partnership has helped secure conservation easements on 85,000 acres of land, manage noxious weeds on 100,000 acres, and rehabilitate 2,100 acres of wetlands. It has also restored portions of 40 Blackfoot River tributaries and improved bull trout passage on 300 miles of streams and river—all while helping ranching families keep their operations going strong.

Most of these achievements were coordinated by the Blackfoot Challenge, a landowner-led group formed in 1993 (the name came from the title of a *Montana Outdoors* article published two years earlier on restoring the river's trout fishery). The Challenge, as it's locally called, is a loose partnership of private landowners, federal and state agency representatives, local government officials, and corporate landowners working to enhance, conserve, and protect the natural resources and rural lifestyle of the Blackfoot Valley. So successful has the group been at preserving both ranch life and wildlife, it has developed a national reputation. When U.S. Fish and Wildlife Service director Steve Williams presented the group with the agency's Watershed Stewardship Award in 2003, he said, "The Blackfoot Challenge is doing the kind of landowner-led conservation we need to be promoting nationwide."

As the pressures of development continue to grow in Montana and across the United States, the Blackfoot Challenge's string of success stories is offering hope to other

Head On

"THE" RIVER Made famous by Norman Maclean's 1976 bestseller, the Blackfoot River Valley is home to both fly-fishing legend and long-held ranching traditions.

DAVID R. BENNETT

ranchers and conservationists working to save their natural and cultural heritage.

HISTORIC INDIAN HIGHWAY

If ever a river corridor was worth protecting, it's the 132-mile Blackfoot Valley. Stretching from the Continental Divide west to the Clark Fork River, bordered on the north by the Bob Marshall and Scapegoat wilderness areas, the valley is home to grizzly bears, mountain lions, wolverines, lynx, and elk. The valley's streams and wetlands attract bald eagles, peregrine falcons, and 21 species of waterfowl. And native bull trout and westslope cutthroat trout swim in the Blackfoot River and its tributaries.

Roughly 16,000 years ago, the lower half of the Blackfoot Valley lay at the bottom of glacial Lake Missoula. This 520 cubic miles of ice-dammed water periodically blew out, causing cataclysmic floods that scoured the landscape of the Northwest from what is now Clearwater Junction (where the Clearwater River meets the Blackfoot) to the Pacific Ocean. Shoreline rings visible on mountainsides above Missoula mark the ancient lake's various reincarnations, and glacial wetlands in the Blackfoot Valley are tangible remnants of the most recent ice age.

Prehistoric human inhabitants may have witnessed the last of the great floods, but it's the oral traditions of the Salish and Blackfeet Indians that give us the first human tales of the region. The Salish called the Blackfoot River *Cokahlarishkit*, or "the river of the road to buffalo." They and other tribes living west of the Continental Divide traveled along this route each year from the mountains to the bison-rich plains over what is now Lewis and Clark Pass.

The valley had seen a great deal of human use before Meriwether Lewis, returning from the Pacific, followed the Blackfoot River in July 1806 to reach the Missouri. Pioneers and settlers who followed the Corps of Discovery saw reasons to remain in the fertile valley. By 1885, the Blackfoot Valley was home to Montana's first large-scale logging operation. Five years later, the Mike Horse Mine opened on a Blackfoot River tributary. In the decades that followed, miners staked claims to more than 150 gold, silver, and copper mines, while ranchers fed their cattle on the valley's lush native grass.

By 1976, when Norman Maclean's Blackfoot River–based bestseller *A River Runs Through It* was published, the river was already attracting recreationists, retirees, and developers. After the movie of the same name premiered 14 years later, the valley became a holy site for fly anglers from throughout the world.

Not all who visit or put down roots in the Blackfoot River have treated the landscape with reverence. Sloppy mining practices, overaggressive grazing, and clear-cut logging combined to fill the river with heavy metals and sediment. Native bull trout and westslope cutthroat trout, their food sources poisoned and spawning gravel smothered, began to disappear.

Meanwhile, many landowners drained wetlands, channelized tributary streams, and erased brush from streamsides, further damaging fish spawning grounds as well as waterfowl nesting areas. As the valley's human population grew, new development fragmented contiguous habitat needed by elk, grizzlies, and other species.

MEETINGS AT TRIXIE'S SALOON

Valley residents slowly and gradually responded to these and other land use problems. In the early 1970s, several private ranchers began working informally with Montana Fish, Wildlife & Parks and Bureau of Land Management staff to reduce trespass. They created the 13-mile Blackfoot Recreation Corridor, in which landowners agreed to open their land to public hunting, fishing, and hiking in exchange for FWP creating safety zones around buildings, constructing parking lots, and regulating hunter numbers.

In the mid-1970s, valley residents helped convince the Montana legislature to pass legislation allowing for the sale of conservation easements. The state's first conservation easement was negotiated in the Blackfoot Valley in 1976.

"The Blackfoot Challenge grew out of these and other issues that were rather narrowly focused in the 1970s," says Land Lindbergh, a local rancher and one of the group's original founders. "Residents with a real stake in these matters would meet in the fields or at Trixie's Saloon in Ovando and try to find some common solutions."

By the 1980s, a larger group of landowners and agencies had begun dealing with a growing number of concerns, such as controlling noxious weeds, reducing grizzly bear depredation, and saving bull trout.

"It was clear there were changes coming to the Blackfoot Valley," says Lindbergh, "but valley residents wanted to control that change and not be pushed around by outside influences."

The Blackfoot Challenge was formed to help locals maintain control over their home and their destiny. After a contentious start, in which participants often shouted out their disagreements, the group established guidelines for civil discourse.

"We established a culture of cooperation and communication, a forum where ranchers, biologists, landowners, and agency representatives could communicate openly," says Ron Pierce, FWP fisheries biologist in Missoula and a partner in the Challenge since its beginning. "That cooperation then shifted to on-the-ground stream and wetland restorations, which also helped bring down barriers. Sure, it was a bit rocky at first, but I know of no other place where people have been able to resolve differences across the table so constructively."

One reason for the Challenge's success has been the willingness of participants to consider other ways of looking at the world. David, Randy, and Brent Mannix, owners of the Mannix Brothers Ranch, are fourth-generation Helmville ranchers who

"What could we do to keep the Blackfoot Valley from becoming another Bitterroot Valley or Gallatin Valley?" —HANK GOETZ, *Lands Coordinator, Blackfoot Challenge*

Sam Curtis is a freelance writer in Bozeman.

COWS AND GRIZZLIES The challenge is to preserve the valley's rural lifestyle while protecting and restoring critical fish and wildlife habitat.

TERI GARRISON

have seen a steady change in the way people view land use in the Blackfoot Valley.

"Not long ago, agriculture was king, and no one else in the valley cared much about the land and water that ranchers were using," says David Mannix. "Well, now there are people living here in the valley and across the country who do care about things like fish and wildlife and water quality. And they all will have a say in what happens here. So, what the Challenge does best is soften the collision that happens when different views meet. That hasn't happened overnight, but the Challenge has helped build trust between the many different interest groups in the valley, and we've seen that we have an awful lot in common."

Another reason for the group's success was the willingness of several local landowners to risk being the first to sell perpetual conservation easements to public agencies and private conservation groups.

"Some people stuck their necks out," says Lindbergh. "They did things that said to the rest of the residents of the Blackfoot Valley, 'You know, there are some possibilities here. Maybe we can work together to get control of all these changes that are coming down the road at us.'"

SHARED SACRIFICE

Citizens can lead, but they often need the money, manpower, and technical expertise of public and private agencies to accomplish their goals. When local Blackfoot Valley landowners teamed up with FWP, the U.S. Fish and Wildlife Service, the Bureau of Land Management, the Big Blackfoot Chapter of Trout Unlimited, and The Nature Conservancy, they accomplished things that would have been difficult on their own.

According to Jim Stone, a good example of that collective success is in how the Blackfoot Challenge has allocated water during the recent drought.

"We've been able to bring together those with senior and junior water rights, including FWP and even a golf course, and come up with what we call the 'shared sacrifice' approach," says Stone, a rancher who chairs the Challenge's board of directors. Some ranchers, he explains, volunteer to use less water than is their legal right. "What that does," Stone says, "is allow everyone to keep pumping some water, while still keeping enough water in the Blackfoot for fish to survive."

Like a well-run business, the Blackfoot Challenge has established various committees to study and recommend solutions on categories such as habitat and water quality restoration, drought and water conservation, forestry, wildlife, recreation, weeds, and education. These days, 400 landowners and 70 partner groups, agencies, and businesses participate in planning and carrying out on-the-ground projects recommended by the committees.

In 2004, the Challenge celebrated its greatest accomplishment to date: acquiring more than 40,000 acres of land from Plum Creek Timber Company. In the late 1990s, after Plum Creek began putting its Blackfoot Valley parcels on the market, members of the Challenge feared the valley's famous open space would soon fill with trophy homes, fragmenting wildlife habitat and degrading the historically rural setting.

"We started asking ourselves what we could do to keep the Blackfoot Valley from becoming another Bitterroot Valley or Gallatin Valley," says Hank Goetz, a local resident who coordinates land projects for the Challenge.

The answer was to form a partnership with The Nature Conservancy. TNC, which assumed the financial risk of obtain-

ing loans and buying the land, purchased 43,000 acres of Plum Creek property in 2004 and has an option to buy an additional 45,000 acres. Scattered along the valley from Lincoln to Ovando, the parcels contain elk and lynx habitat, bull trout streams, and large tracts of forest. The conservation organization plans to resell the property—with attached environmental safeguards and development restrictions—to private and public buyers working in cooperation with the Blackfoot Challenge.

The land purchase project got a boost recently when Senator Conrad Burns and Montana's other congressional delegates obtained $18.3 million from the 2005 congressional appropriations bill for Blackfoot Valley acquisitions. The money will be used to purchase parcels of the timber land from TNC to become additions to national forests and Bureau of Land Management property and part of the state Blackfoot-Clearwater Wildlife Management Area.

The combination of congressional leaders, local landowners, anglers, private groups, and public agencies, says Mike Thompson, is what makes the Blackfoot Challenge such a powerful force. As manager of the Blackfoot-Clearwater WMA, Thompson has been in the thick of Blackfoot Valley issues since the 1980s. He's seen how local landowners rose above internal squabbles and personal gain to find solutions to land use problems benefitting the entire community. Most important, he says, the Challenge's citizen members refuse to let the forces of real estate development and agricultural economics control their destiny.

"They don't sit around saying, 'Oh well, times are changing, there's nothing we can do about it,'" Thompson says. "If things are changing in the Blackfoot Valley, it's because the Blackfoot Challenge is making those changes."

WAYNE MUMFORD

"This partnership approach is the only way smaller ranches like ours can survive. It's the only way this rural lifestyle can be maintained for our kids."

—JIM STONE, *Rancher and Blackfoot Challenge Board of Directors Chairman (shown here with son Brady)*

A Winter Resort for Blackfoot Elk

Located 40 miles east of Missoula at the confluence of its namesake rivers, the Blackfoot-Clearwater Wildlife Management Area is like a Club Med for elk. The 72,000-acre WMA, Montana's largest, was established in 1948 to provide essential winter range for elk in the surrounding Bob Marshall and Mission Mountains wilderness areas.

Manager Mike Thompson says the WMA's extensive native rough fescue grasslands provide elk with nutritional winter food. The area also has abundant shrubs, which elk eat when grasses ice over, and it provides security from predators.

To celebrate the WMA's 50th anniversary, a citizen's advisory group decided that private lands within the WMA should be purchased. Members were concerned the inholdings, owned by a timber company, would be sold for housing development.

In addition to citizens, Thompson says credit for securing the inholdings goes to the Rocky Mountain Elk Foundation, Plum Creek Timber Company, Five Valleys Land Trust, The Nature Conservancy, the Blackfoot Challenge, Lolo National Forest, and the Montana Department of Natural Resources and Conservation.

In November 2004, the last of several land transfers and acquisitions were signed, protecting a total of 7,800 acres within the Blackfoot-Clearwater WMA.

"It was really moving to see so many people come together on this effort," Thompson says. "In 1998, they said they wanted to make this happen, and they did."

MICHAEL DOYLE

FILLING THE GAPS In 2004, nearly 8,000 acres of inholdings were acquired for the Blackfoot-Clearwater WMA, located near Ovando.

North American Beaver

(Castor canadensis)

BY GARY BEELER

Once abundant beyond measure, it was the beaver and its valuable fur—used to make top hats in Europe—that first attracted explorers to the American West. Then, in just a few decades, this largest of North American rodents was trapped so heavily it nearly disappeared. Over the past century, however, this great engineer of the wilds has made a remarkable comeback.

APPEARANCE Beavers are nocturnal, so the best way to spot one is to check creeks and streams for dams or lodges, and then wait there until dusk. Look for a dark brown animal 35 to 46 inches long (which includes its 16-inch flat, scaly tail) and weighing 35 to 75 pounds. The beaver's massive head has small ears, beady little eyes, and four large, orange incisors. The front feet contain five widely splayed toes. The hind feet are twice as long and have webbing between the toes.

SOUND Beavers hiss at muskrats, strange beavers, or anything else thought to be a threat. The young whine, much like human babies. Another sound is the loud, wet slap of the animal's tail when it is agitated and plunges underwater. The report scares intruders and warns other beavers of danger.

Writer/photographer Gary Beeler lives in Boyd.

FOOD Beavers eat trees, grasses, forbs, and aquatic vegetation. The soft inner bark of quaking aspen, willow, or cottonwood is a favorite. A beaver will hold a branch in its front feet and turn it while gnawing the bark off, just like we eat corn on the cob. Branches of willows and other trees are cut and stored underwater in a cache to be eaten during the winter months.

REPRODUCTION In January or February of its third year, a beaver finds a lifelong partner and then mates. Three or four kits, born in May or June and weighing about 1 pound, greet the world with fur, teeth, and open eyes.

Kits become skilled swimmers within a week, begin to gnaw wood after just 11 days, and help gather tree limbs for lodge construction within three months. They stay home for two years, helping with chores such as dam repair or, by the second summer, grooming new kits. Their parents send them away during their third summer.

LODGING Dome-shaped beaver lodges may be either freestanding or attached to a bank. Beavers live inside these sturdy homes safe from predators such as coyotes and wolves. To prevent predators from entering, beavers build lodge entrances below water level. Using sticks and mud, beavers build dams on streams and rivers to raise the water level so it remains above the lodge entrance and to create a deep pool for storing food.

ADAPTATIONS A beaver has an extremely sharp sense of smell, which compensates for its relatively poor sight and hearing. Beavers use smell to detect predators, recognize relatives, and determine which branch will be the tastiest.

A beaver can see underwater thanks to its clear eyelids. Valves in the nostrils and ears keep water out. Fur-lined lips behind the teeth seal the mouth when a beaver swims while carrying a branch in its teeth.

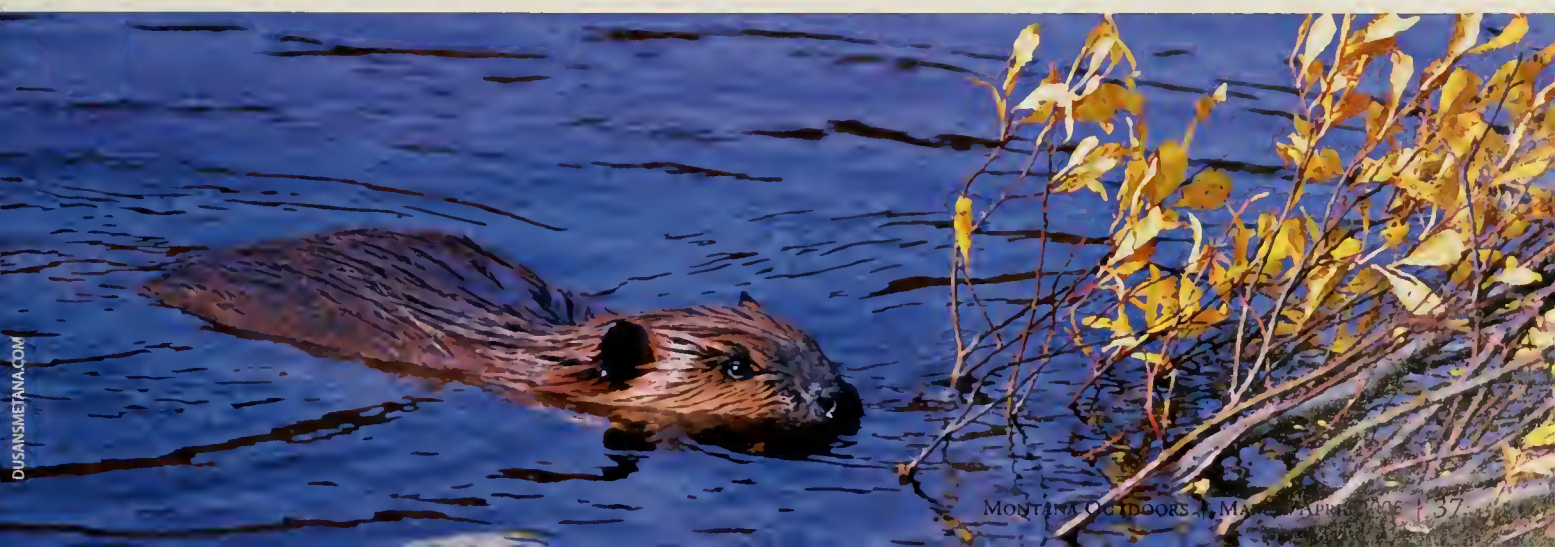
Beaver incisors grow continuously, and gnawing wood keeps them worn down. A beaver can cut down a 5-inch willow in just a few minutes.

Using its webbed hind feet for propulsion and its flat tail as a rudder, a beaver can swim up to 6 miles an hour. It can also hold its breath underwater for up to 15 minutes, helping it to avoid predators.

Beavers are active year-round and must conserve heat in the frigid waters of winter. A thick layer of insulating fat is covered by short but dense underfur. The wooly underfur is covered with long, course guard hairs the beaver preens with water-repellent oil it combs from anal glands with its paws.

STATUS IN MONTANA The industriousness that makes beavers so fascinating can also make them pests. Beavers cut down beloved trees, and their dams cause flooding and plug up irrigation ditches.

According to Brian Giddings, Montana FWP furbearer coordinator, beaver numbers have been increasing statewide over the past decade due to a decline in harvest resulting from low pelt prices. The state has recently lengthened the beaver trapping season in parts of Montana to reduce beaver damage around farms, ranches, and the growing number of streamside homes.



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EARLY BLOOMERS

Also known as prairie crocus, pasqueflowers are one of the first forbs to bloom each spring. In some parts of eastern and central Montana, they form vast carpets of lavender beginning in late March and continuing, at higher elevations, through early May. A few days after blooming, the pasqueflower's petals fall off, exposing the seed heads, which the wind then carries off across the prairie. Photo by Shan Cunningham.

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